Army Reserve Magazine

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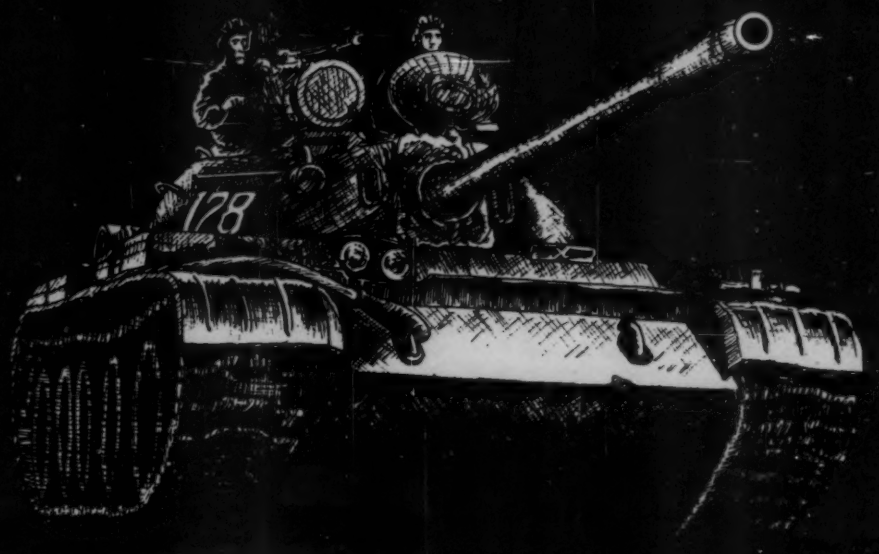
Spring 1980

THE SOVIET THREAT



Ivan Korobov and Friends
Coming at You on Page 22

BRIEFS

• Members of the Individual Ready Reserve (IRR) may earn retirement points for participation with the Civil Air Patrol. Here's how: IRR members submit a request for attachment to the commander of the Civil Air Patrol unit they're interested in joining. With acceptance, the CAP commander forwards the approved request to RCPAC in St. Louis, ATTN: AGUZ-PMA-B, where attachment order will be prepared. Retirement points will accrue from DA Form 1380 which should also be submitted to RCPAC by the CAP unit commander, showing the number of training hours.

• FORSCOM Regulation 350-2, the weighty Reserve Component training "bible" will undergo major surgery by the end of the fiscal year 1980. FORSCOM proposes to have the new version of the reg effective Oct. 1, 1980. The plan is to cut out as many of the 27 appendices as possible. The basic document is also being pared down to give local commanders more flexibility.

• The PX will now cash personal checks up to $100. The new total doubles the old maximum.

• Wrestling with the new OER? The Army Administration Center at Fort Benjamin Harrison, Ind., has developed a correspondence training course to teach Officer Evaluation Report System skills. It's called AG Subcourse 19 and is available from the Army Institute for Professional Development, U.S. Army Training Support Center, Newport News, VA 23628. DA Form 145 is the appropriate application.

• Rental cars are frequently cheaper now for the military whether on official or personal travel. Most of the major car rental agencies now give a discount to Active, Reservist and retired service and to active and retired DOD civilian personnel. Ask about the rates from the companies. You'll need proper identification establishing your DOD status.

• Under Public Law 96-107, personnel entering the military, Active or Reserve, on or after Nov. 10, 1979, incur a six-year military service obligation regardless of their age at the time of service entry. Previously, those who joined on or after their 26th birthday were obligated only for the period they agreed to serve either on active duty or in the Reserve.

• Having employer hassles? Two organizations can assist Reservists with problems concerning their rights to pursue military obligations and not run afoul of civilian employers. One is the National Committee for Employer Support of the Guard and Reserve, a nationwide Department of Defense program with units in every state. Another is the U.S. Department of Labor's Labor-Management Services Administration, located in 49 cities around the country. Check the phone book under U.S. Government for the Labor Department, and check the summer issue of *Army Reserve Magazine* for more information on the National Committee.

• *IRR MEMBERS NOTE. Army Reserve Magazine,* and SOLDIERS magazine, get a lot of return mail from IRR members who have moved. Please keep the Reserve Components Personnel and Administration Center (RCPAC) informed of your corrct address. The address is: Commander, RCPAC, ATTN: AGUZ-OEPMD, 9700 Page Blvd., St. Louis, MO 63132. All change of address information should go to RCPAC. Letters to the editor and story submissions should continue to go to the editorial offices of each magazine.

Army Reserve Magazine

Vol. XXVI Number 2 Spring 1980

DEPARTMENTS

BRIEFS ---------- 2
PEOPLE ---------- 3
LETTERS ---------- 6
ACTIVE ---------- 7
RESERVE GUIDE ---------- 10
HAPPENINGS ---------- 14
ISSUES ---------- 22
BOOKS ---------- 31
DEVELOPMENTS ---------- 32
CONSUMERWATCH ---------- 34

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COVER STORY: The staff of *Army Reserve Magazine* began planning to cover the Soviet military threat last summer, long before events in the Middle East triggered a national preoccupation with the military doings of the Soviet Union. We thought, at the time, that an analysis of the Russian defense establishment should follow after our treatments of manpower and the draft (Fall 1979) and mobilization (Winter 1980). Dean Honeycutt provided the piece on the Soviet Navy. Janet Hake worked up the other Soviet military articles.

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1st Lt. Hightower confers with Platoon Sgt. James Butler

PEOPLE

1st Lt. Kathie J. Hightower, head of the 276th MP Platoon in Opp, Ala., is the first female unit commander within the 121st Army Reserve Command. Her people call her "Mama," instead of the usual "Old Man" nickname given to male commanders. She's a patriotic individual with some definite ideas on training and self-improvement. In an interview for the 121st newspaper, the *Torch*, Lt. Hightower commented on some of these ideas with Master Sgt. James P. Maddox. The 121st agreed to share the interview with *Army Reserve Magazine*. The photos are by Paul Adams.

Maddox: *Why did you join the Army?*

Hightower: While I was in school, I wasn't very patriotic. I spent a year in Austria studying. After returning from Europe, my mind began to change about the United States. I started feeling that this country is important even though it has its faults. But in so many ways it is better than the other places that I have seen. This feeling and the encouragement of my parents were the prime factors causing me to join the Army.

Maddox: *How did the Reservists in your unit react to a female commanding officer?*

Hightower: Most of the reaction has been favorable. The NCOs and enlisted have been super. There has been some resentment, but very little. I think the men were more curious of what it would be like with a female commander.

Maddox: *How do the men in the platoon address you?*

Hightower: I find that humorous, also. Some of the men call me "sir" and the others, "m'am". At summer camp some of the troops referred to me as "Mama". I guess that's better than "The Old Man."

Maddox: *What advice would you give prospective female unit commanders?*

Hightower: I think the biggest thing is the same advice that I got as a new lieutenant: take your time and see where everything is. Don't jump in saying I'm going to change this or I'm going to change that. Find the areas that need improvement and work on that. Use the knowledge of your troops. I found that I can learn a lot from my men. Most of my top NCOs have more experience in the Army than I do.

Maddox: *How has your assignment as unit commander affected your family?*

Hightower: They think it is great. It's nothing new for my husband. We met while on active duty in Germany, and now he's a lieutenant at Fort Rucker. As you can see, we have a lot of common interests. My mother has backed me; in fact, she was the one who encouraged me to join the Army. Some of my women friends kid me about my job, but others think I have a super job.

Maddox: *What would you like to accomplish while commander of the 276th?*

Hightower: There are two main areas that concern me about the platoon. The first is training. The second is the strength of the unit, which I am working on. For myself, improvement of my knowledge of the MP function is my main goal. Presently, I'm taking correspondence courses and I'm enrolled in a graduate program in criminal justice.

Maddox: *What can the male Reservist do to help the female soldier?*

Hightower: I think just accept people for themselves and for the job they do and judge people based on how they perform.

Hightower: the 276th's "Mama"

Bush: a mother who can pack a parachute

Whipple getting along in the freezing cold

PEOPLE

Tarleton trying to discourage intruders

What does a 47-year-old mother do to feel young again? Well, she could start jumping out of planes. And if she's in the Army, she can get paid while she's learning.

That's what **Sgt. Therese J. Bush,** with the Army Reserve 421st Quartermaster Company based in Fort Valley, Ga., did. Last summer she went to Fort Lee, Va., and became airborne qualified to jump from cargo aircraft and to pack parachutes. Her air drop officer, **CWO 3 Kenny Williams** figures she's the oldest student he's seen go airborne. But by seeing Sgt. Bush pack a parachute you would never know she's no longer in her 20s.

"Advance at your own risk," is the point **Staff Sgt. Lorrie R. Tarleton** is trying to get across to the photographer and any other intruders. Staff Sgt. Tarleton is guarding the door to a communications van, one of her annual training duties for the 341st Army Security Agency Company (Separate Infantry Brigade), that operates out of Fort Lawton, Wash.

Most Army Reserve units have their annual training during the summer, because it's warmer then. But the 1st Battalion, 409th Infantry of St. Cloud, Minn., waits until winter because they thrive on (tolerate?) cold—freezing cold that drops to the rock-bottom depths of 35 degrees below zero.

The unit didn't have to go far to find it. Minnesota is a cold-winter state anyway, and it was just a 40-mile drive down the road to Camp Ripley, where **Sgt. George Whipple** helped set up this 10-man tent. The 409th's cold-weather mission has taken them as far north as Alaska.

When their company commander told them to go jump in a lake, **Spec. 4 Richard J. Maynard** and **Sgt. Edward J. Chaffin** jumped—right into Vandercook Lake near Jackson, Mich.

They and 30 other members of the 303d MP Company proved they could swim 50 meters in fatigues and boots, and then they tried it again, this time carrying M-16 rifles. While they were immersed in all this splashing around, the unit learned how to stay afloat using wet fatigues as a flotation device by tying off the legs at both ends to trap air. (*Photo by*

Maynard and Chaffin chin deep

Paasch: gorilla or guerilla?

Moores: proud to be a Reservist

Tony Dugal of the Jackson Citizen Patriot.)

There are gorillas and there are guerrillas. Gorillas swing in trees and eat bananas. Although the others may often swing in trees, bananas aren't necessarily the staple of their diets, and they carry rifles and practice an insurgent form of warfare.

Spec. 4 George R. Paasch looks like a hybrid of the two or, at least, something out of "The Planet of the Apes" movie series. Actually, it's a disguise he put on for the entertainment of his unit, Company B, 100th Battalion, 442d Infantry in Hilo, Hawaii.

Spec. 5 Mary Moores is proud to be a Reservist and she aims to show it, here, by seeing how her new Army Reserve display car tag will look on the front of her automobile. The metal, multi-colored tags are being distributed to members of 121st ARCOM units in Alabama, Mississippi and Tennessee. Spec. 5 Moores is serving a two-year active duty tour at the 121st's headquarters in Birmingham, Ala.

Capt. William D. Dubuisson, Jr., finally got his just desserts. Eleven years after the fact, he was awarded a Purple Heart.

Capt. Dubuisson earned his medal in Vietnam in 1967. He was piloting a helicopter when he was hit by enemy gunfire. "The round passed over my left arm, but pieces of metal and Plexiglass struck my left arm, right thigh and ankle," he recalled. Back at the base he was told to fill out the paperwork for the award; however, he never got around to it.

Later he changed his mind. He wanted that medal. After a lot of governmental red tape, Capt. Dubuisson got his Purple Heart.

The Army Reserve has royalty within the ranks—well, at least the kin of royalty. **Second Lieutenant Vaea Ainuu,** radio-television officer for the 302d Public Affairs Detachment in Los Angeles, was recently visited by his Samoan cousin, **His Highness Prince Laupepa Malietoa.** The prince was visiting the United States to serve as a technical advisor for the upcoming movie, "Queen Emma of the South Seas," a romantic drama set in Western Samoa.

Dubuisson: the man with the purple heart

Ainuu and his cousin prince

LETTERS

Railroad

Sir: Could I possibly obtain the name and address of the closest U.S. Army Reserve railway operating unit located in Illinois or close to the state of Illinois? I would like to obtain information about the unit. Thanks for your time and trouble.

Richard Bennett
Aurora, Ill.

The Army Reserve once had a roundhouse full of railroad units. There were a number of railroad brigades, some of which made their headquarters at major railroad company shops. A number of these Reserve rail outfits were mobilized during World War II and saw service operating the trains wherever U.S. troops saw battle. All the operating units are now gone, but a few rail maintenance organizations remain. The nearest to you are part of the 757th Transportation Battalion, 2372 S. Logan Avenue, Milwaukee, WI 53207.

Frightening Statistic

Sir: On page two of the Winter *Army Reserve Magazine*, I find printed a most frightening statistic—"It's reported that 40 percent of the Vietnam-era veterans suffer from emotional problems . . ."

It's frightening in two ways:

a. If the statistic and the world "problem" are to be interpreted literally, then we as a nation have a most severe problem literally; and our generally reported casualty statistics for the Vietnam war are way off base.

b. Frightening that responsible people would add validity to a statistic like that, by printing it in a widely circulated publication, while attributing the source to "It's." Who is "It's"?

Imagine the civilian employer (and Army Reservist) who reads this and then has to make a decision about hiring Vietnam-era veterans for his business. He's told that there is a 40-percent chance that the individual standing in front of him looking for a job has a drinking or drug problem. This employer would be smart to stay away from us Vietnam-era veterans. The statistics are against us. I wouldn't take a chance on a statistic like that if I didn't have to—and the employer doesn't have to. He can just as easily hire a non-veteran. Are we really doing ourselves right with journalism like this?

Maj. Joseph Arlauskas
Naxera, Va.

We didn't dream up the statistics and we were not trying to do the Vietnam vet any damage. The statistics came from the Veterans Administration who asked us to help promote their new counseling and referral program for troubled Viet vets. Many Vietnam-era soldiers are now Reservists. Some might be able to put the VA's services to good use and live more contented lives—and be better soldiers—as a result.

What About IRR?

Sir: Your article on mobilization (Winter 80) was very informative and timely, but what about the IRR? What process do we go through at mobilization and who goes first, troop units or IRR members?

CWO-3 W. Larne Gabriel
Oak Brook, Ill.

Good questions. We plan to address the entire subject of the role of the IRR in the Fall 80 issue, but in the meantime, here are some quick answers. The IRR will be used to fill up any unit—Active, Guard or Reserve—that needs trained replacements. In times past, IRR members assembled at posts and were ordered to fill up any unit needing their skills and grades. With no draft, the likelihood is that IRR replacements will be needed immediately upon mobilization. Got your boots shined?

Employment Trouble

Sir: I am a member of the U.S. Army Reserve and would appreciate any information you can send me concerning my rights under the reemployment statutes such as Section 9(g)(4) of the Military Selective Service Act of 1967. My immediate problem concerns requested leave of absence for weekly and weekend drills. I am a day worker (8:00 a.m. to 4:30 p.m.) and have submitted a single request citing the dates and times of the regular drill periods for the next several months so that my employer will know well in advance that I will not be available for overtime on those dates at the times cited.

My employer contends that my unavailability on those occasions I have drill constitutes a refusal to work. I am penalized on the short-term basis by being charged for those hours on the overtime list, even though I didn't work. Also, in the long run, the possibility of a reprimand or being given several days off without pay exists for what the company contends is "unavailability." I feel I am unfairly penalized because of my Reserve commitment and that during these rare occasions I should be legally excused and not credited with a "refusal." Therefore, I would appreciate any information or advice you can send me concerning my rights in this matter.

Staff Sgt. Hugh V. McCourt, Jr.
Edison, N.J.

You have a classic "employer support" problem, and from what you've told us, your employer may not understand his legal requirements to grant you time off to pursue your Reserve career. We've handed your letter over to the National Committee for Employer Support of the Guard and Reserve, a Department of Defense organization that sorts these problems out, and seeks to involve and inform employers about the Reserve. We plan a major spread on the employer support business in the Summer 80 magazine.

Redesignated

Sir: Your centerfold of Reserve shoulder sleeve insignia is impressive. However, one error was noted in our unit designation. The 311th Support Brigade became the 311th Corps Support Command effective October 16.

Maj. James L. Wells
311th Support Command
Los Angeles, Calif.

Insulted

Sir: I just read your Fall 1979 issue. On pages 18 and 19 is a beautiful two-page color spread of various shoulder patches worn by the USAR. I found it greatly disappointing and somewhat insulting that, again, the Special Forces had been quietly put aside and forgotten. The side-script of the layout did not say that it was a sample, or that it was *some* of the patches. Even though this seems to be the prevalent attitude within the Active Army, I had honestly expected better of this editorial staff.

Sgt. Joseph T. Bergen
11th Special Forces Group (Abn)
Fort Meade, Md.

Our intent was not to insult. We ran only those patches which were assigned to specific USAR units. The SF patch is worn by all Special Forces units, Active and Reserve alike.

Subscriptions

Yes, Virginia, there is an *Army Reserve Magazine*. Here's how you can get yours.

USAR UNIT MEMBERS—make sure that your unit has your correct address. If they do not, enter it in the remarks section of the DA Form 1379—that's the record of your training. Every unit completes one.

IRR/STANDBY MEMBERS—Write a letter to RCPAC, 9700 Page Blvd., St. Louis, MO 63132. Tell them you want to verify or correct your home address.

OTHER FOLKS—write to us. We would be glad to add you to our VIP list.

New Thinking on America's Defense

President Carter's State of the Union address, delivered in January, initiated some major shifts in national defense policy. The new direction which may most directly affect Army Reservists is the President's plan to register young people for a possible future draft call.

The presidential declaration in favor of registration sets aside a policy enunciated by the Administration during the summer of 1979. At that time, a number of Administration officials were quoted in ways which suggested that draft registration might be on the drawing boards. After a short flurry of public and media interest, the door slammed; the Administration announced the registration was "not necessary." At the same time, a House of Representatives' committee report called for peacetime registration. The debate was on.

The debate didn't last long. (See "The Draft," Fall 1979). The full House killed the committee's pro-registration action and, coupled with the Administration's hostility, the subject of registration and the draft appeared to be dead.

But the back-to-back Iran and Afghanistan crises resurrected the dead in short order. None of the Armed Forces succeeded in making 1979 recruiting objectives. And a number of crisis-fueled hard looks at American military capabilities led the Administration to a new conclusion: the Nation needs to take stock of the whereabouts of its military-age population.

The new policy—details of administering it are still being worked out—came at a time when

the American public demonstrated a growing awareness of the need for a stronger defense establishment.

"War Linkage"

An Associated Press-NBC poll, conducted late in 1979, indicated that better than half the American public supported an increase in real defense spending. This increase, announced in the State of the Union Address, would expand defense outlays by nearly 5 percent a year for each of the next five years. The 5-percent plump-up would be in addition to inflation.

The poll results reversed a trend against a bigger defense budget, a trend which dates to Vietnam days. Why the reversal? According to the pollsters, the support for more defense dollars reflects a growing fear of war. Nearly 30 percent of those answering the query foresaw the country involved in a war within three years. The poll-takers noted that this "war linkage" or "level of fear" had shot up from that indicated in a similar poll taken in late 1978.

Where's It Going?

Where does the national leadership plan to put the extra dollars? If Congress supports the plan, most of the increase would go to beef up strategic (nuclear) forces of all the services, to upgrade military readiness in Europe and the Pacific, and for creation of a rapid deployment force capable of quick response to distant crises.

Quick Strike Force

The Department of Defense is readying a new military headquarters designed to form the nucleus of the Nation's quick strike forces. Popularly called the "rapid deployment force," the new command structure will in fact be a joint service task force headquarters working out of the U.S. Readiness Command at MacDill Air Force Base, Fla. It's headed by Marine Corps Lieutenant General Paul A. Kelley.

This task force will plan for the deployment and use of U.S. military forces in non-European hot spots worldwide. During peacetime the task force gets no troop units or air or naval forces of its own. However, if a crisis calls for the rapid deployment of American military power overseas, the joint service task force three-star would become operational commander of "essentially all the units not committed to NATO or the 2d (Infantry) Division in Korea," said Secretary of Defense Harold Brown.

Can we get the tanks and troops to where they have to go? A new joint service task force will organize American forces to answer "yes" to that question.

According to Secretary Brown, the rapid deployment forces would include the Army's 82d Airborne Division, the 101st Airborne Division (Airmobile) and a number of other Army units. Also included would be the great bulk of the Marine Corps as well as some air and naval forces.

The Iranian and Afghanistan crises stirred public and media interest in the Defense plan to create the task force. But Department of Defense had been working on the task force idea long before.

Presently, no USAR units are expected to be part of the rapid deployment force, though "discussions on that subject are still going on," said a mobilization planner in the Office of the Chief, Army Reserve.

More BLACK HAWKS on the Way

The Army recently authorized a $257 million production program to build more UH-60A Black Hawk helicopters. The number of these utility transport aircraft now on order is 255. Plans are now to procure another 1,107 to meet the Army's needs.

The first Black Hawk was delivered to the Army in October 1978. To date 43 have been delivered, a good share of them sent to the 101st Airborne Division (Air Assault) based at Fort Campbell, Ky.

Black Hawks carted around three battalions last fall during a four-week field exercise held at Fort Campbell. They flew 1,740 sorties, carrying 12,500 troops and hoisting more than 1,000 tons of equipment. The workhorse chopper, designed and produced by Sikorsky Aircraft, is powered by twin General Electric T700 turbine engines rated at 1,543 horsepower each. Together, the engines can handle a four-ton sling load.

Last November the 101st Airborne "Screaming Eagles" gave them another workout in Dragon Team XI, an Army exercise at Fort Hood, Tex., involving infantry, paratroopers, tanks, fighter aircraft and other helicopters. Fifteen Black Hawks were transported from Fort Campbell to the battlefield by way of three Air Force C-5s.

All of the Black Hawks operated in a simulated battle. During the 27 hours of actual field exercise, the helicopters logged a total of 164 hours of flight time and one flew nearly 27 hours with the same crew during a 34-hour period.

The Black Hawks proved capable of carrying full squads of 11 field pack-equipped combat soldiers to the battle zone. As each aircraft touched down on the battleground, the soldiers scrambled out, took up defensive firing positions, then moved out as the Black Hawk took off for another load.

Using external cargo hooks, they could also carry a variety of heavy equipment to the waiting troops. Refueling in the field extended the amount of time each Black Hawk could remain in the battle area to three hours or more.

Where Are You in the Army Chain of Command?

The U.S. Army is a complicated organization located all around the world. But where does a Reservist fit in to the overall picture? Where are *you* in the chain of command?

Narrowing the scope slightly, if you're a unit member, you're a part of the U.S. Army Forces Command (FORSCOM), the largest operational command in the U.S. defense establishment. Headquartered at Fort McPherson, Ga., its mission is to achieve combat readiness of the Army's entire stateside unit force.

Refer to the chart next page and you'll get an approximation of where your individual Reserve unit fits in the FORSCOM scheme. The rectangles in this chart represent nearly a million soldiers total, both Active and Reserve.

Your unit is commanded by one of the Army Reserve commands (ARCOMs) or Reserve General officer commands (GOCOMs) scattered around the country. An ARCOM is a peacetime headquarters for a group of Army Reserve units. During a call-up, however, each unit would mobilize on its own to fill a need somewhere in the Army. The ARCOM itself has no single call-up mission. A GOCOM, also an organization of Reserve units, differs in that it would mobilize as a single command.

All the ARCOMS are under the direct command of either the 1st, 5th or 6th Continental U.S. Armies (CONUSAs). Some of the GOCOMs are commanded by ARCOMS while other GOCOMS report directly to one of the CONUSAs.

The CONUSAs are Active Army headquarters, but they command Reserve units. The Active Army units, shown in the chart, come under the direct command of FORSCOM.

Your Reserve unit receives training support from the Army Readiness Regions (ARRs), Army Readiness Groups (ARGs), and Army Reserve senior advisors, which are Active Army subordinates of the CONUSAs. If their assistance is requested by your unit commander, it may come by means of mobile teams that will visit your Reserve center. But neither the ARRs nor the ARGs command your unit.

FORSCOM has training supervision over the Army National Guard units. However, as indicated on the chart, there is no command line from FORSCOM to the National Guard units. The Guard remains under command of the state governors unless it is federalized by the President of the United States.

FORSCOM relies heavily on Reserve units in its contingency plans because the Active Army doesn't have enough support and service units to sustain itself in a large-scale conflict. The Army Reserve, with its many specialized support units, would have a big portion of the job of filling this gap.

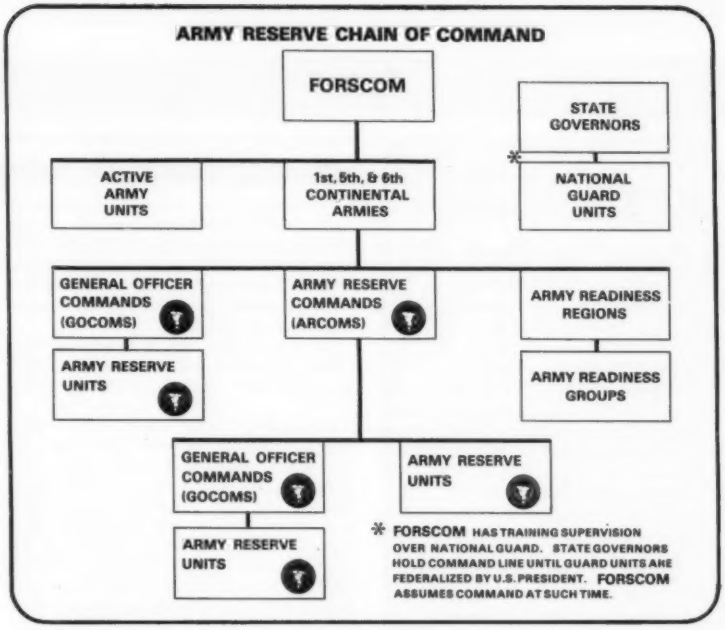
The high point of the training year, for some FORSCOM Reserve units, is participating in a joint exercise involving both Active and Reserve elements. Occasionally, these training exercises require long-distance travel. The U.S. Readiness Command (REDCOM) plays a big part. REDCOM is a joint-service command that responds to the need for deploying FORSCOM forces to distant locations. They organize sev-

eral joint exercises every year, often including selective mobilization of one or more service elements.

Examples of REDCOM exercises include the Brave Shield and Gallant Eagle series conducted at Eglin Air Force Base, Fla., Fort Irwin, Calif., and other training sites. Jack Frost is exactly what its name suggests—a cold-weather REDCOM training exercise that sends FORSCOM units deep into the Alaskan interior.

On top of their military readiness training activities, FORSCOM Active and Reserve units regularly aid local communities in many parts of the country. *(See story below.)*

FORSCOM soldiers wear the same blue, white and red horizontal-striped shoulder sleeve patches of their predecessors, the Army Ground Forces of World War II and later the Continental Army Command. Their number-one mission remains the same: readying stateside soldiers to do their jobs anywhere and anytime they're needed.


ARMY RESERVE CHAIN OF COMMAND
FORSCOM
STATE GOVERNORS
ACTIVE ARMY UNITS
1st, 5th, & 6th CONTINENTAL ARMIES
NATIONAL GUARD UNITS
GENERAL OFFICER COMMANDS (GOCOMS)
ARMY RESERVE COMMANDS (ARCOMS)
ARMY READINESS REGIONS
ARMY RESERVE UNITS
ARMY READINESS GROUPS
GENERAL OFFICER COMMANDS (GOCOMS)
ARMY RESERVE UNITS
ARMY RESERVE UNITS
* FORSCOM HAS TRAINING SUPERVISION OVER NATIONAL GUARD. STATE GOVERNORS HOLD COMMAND LINE UNTIL GUARD UNITS ARE FEDERALIZED BY U.S. PRESIDENT. FORSCOM ASSUMES COMMAND AT SUCH TIME.

Their Specialty Is Saving Lives

by Maj. Burl L. Eastepp, Jr.

The air was still. The night sounds, though, were loud and disturbing. In the distance, the roar of powerful jet aircraft taking off and landing could be heard. Everyone waiting on the ground felt an air of tension, of emergency.

The ambulance driver continued to glance nervously at his watch, while other medical personnel checked and rechecked instruments and equipment. But all scanned the skies, straining to hear the distinctive noise of helicopter rotors.

Suddenly, the night exploded with that unmistakeable sound. Rotors chewed chunks of the night air. The helicopter hovered in on its mission of mercy. Without a signal, the waiting team on the ground went into action, preparing for the arrival of a tiny, precious cargo whose life was hanging in delicate balance.

This drama didn't occur near a battlefield. Nor was it a drill.

In fact, the tense airport scene was a mission of the Military Assistance to Safety and Traffic (MAST) program, underway in northwest Louisiana. This time, MAST crews were flying to save a premature baby, transporting it to an intensive care unit for high-risk newborns. The infant, born in a rural area of northwest Louisiana, was whisked to a medical center equipped with the latest life support equipment. Ground transportation would have taken too long. The baby would never have made it.

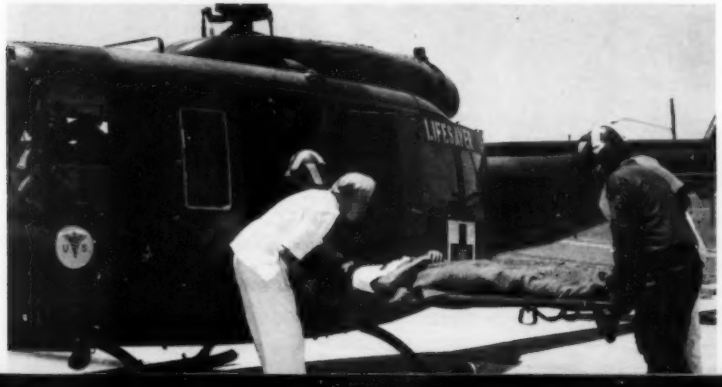
The MAST unit that flew the mission was the 36th Medical Detachment, an Active Army air ambulance unit from Fort Polk, La. The 36th provides emergency helicopter transport services in a 100-nautical-mile radius area around the post.

Transportation of high-risk newborn infants is just one of the services provided by MAST. Patients suffering other types of trauma, such as brain and nerve injuries which require intensive and specialized care, have also been transported. The 36th Med Detachment flew 415 missions from February 1976 through January of last year, 90 of which were premature infants whose survival was unlikely without immediate medical attention. MAST is made to order for rural environments, many of which are not protected by any ambulance service at all.

The Active Army doesn't have a corner on the MAST market. At present, three USAR air ambulance outfits are formal participants in MAST, and a number of others are waiting in the wings. Army Reserve units actually flying MAST missions are the 273d (Tomball, Tex.), 316th (Cleveland, Ohio), and 872d (New Iberia, La.) medical detachments.

The 273d was the first USAR unit to fly MAST and, within a few weeks of the unit's entry into the MAST program, volunteer crews were called to a refinery explosion in Port Arthur, Tex. Though the call came on a weekday, a day with no drilling Reservists on hand, the 273d's full-timers were able to respond in short order.

In the 1970s MAST units nationwide transported 10,639 patients.



No Way for OJT?

MOS Training (How to Get It)

How much Reserve time do you spend training?

Probably not much.

Of course, if you're a unit member you drill an evening a week, or all day on a weekend. And you trot off to an Active Army post for a couple of weeks each year.

If you're a member of the Individual Ready Reserve (IRR) and not in a unit, training may be a rarity, or even nonexistent. As a control group member, you *might* get orders for a couple of weeks in the green suit each year. But, then again, depending on funding, your personal availability and a hundred other variables, you might not. So how do you keep your fading military skills in tone?

In theory, all Reserve duty time is *training* time. Unit drill time is, in fact, inactive duty *training*. What many Reservists still call summer camp is actually active duty for *training*.

But when it comes to *training*, a rose by these other names does not always smell as sweet. Anyone who's been around the Army Reserve (or the National Guard or Active military) knows that being in a legal training status rarely means uninterrupted nose-to-the-grindstone practice of MOS skills.

And few Reservists, especially few control group members, enjoy regular access to all the equipment and weapons required for them to get good at their military jobs.

So, just how do you train yourself?

First off, you read this edition of RESERVE GUIDE. It will tell you, step by step, how a Reserve enlisted person can pick up MOS skills aside from routine unit drills and two weeks annual training. The same procedures work with some variation for IRR members.

Read on.

Correspondence: Doing It at Home

Ever read the inside of a matchbook advertising the benefits of a correspondence school education? You too can become an electrician, an accountant, an artist, even an ordained minister!

Just clip off the tiny form, drop it in the mailbox, and your application for home tutoring soon arrives.

One of the country's largest correspondence schools belongs to the Army. (However, you won't find it advertised inside any matchbook.) It's the Institute for Professional Development (IPD), big brother to the Army Correspondence Course Program, and it has a growing enrollment of over 200,000 soldier-students. Better than 40,000 of these are Reservists.

The institute handles a huge volume of paperwork for 16 U.S. Army Training and Doctrine Command (TRADOC) service school correspondence programs. IPD doesn't create the correspondence courses, it manages them. It's a mammoth task, requiring a staff of 120, a separate zip code, and a semi-trailer a day to handle all the mail.

IPD prints, stores and mails the courses, reviews the curricula, and answers student queries. The courses themselves are products of the TRADOC service schools. The subjects? Air Defense to Tranportation and everything in between.

Why Sign Up

Reservists sign up for the training courses to fine-tune MOS skills, earn promotion points, and gain retirement points.

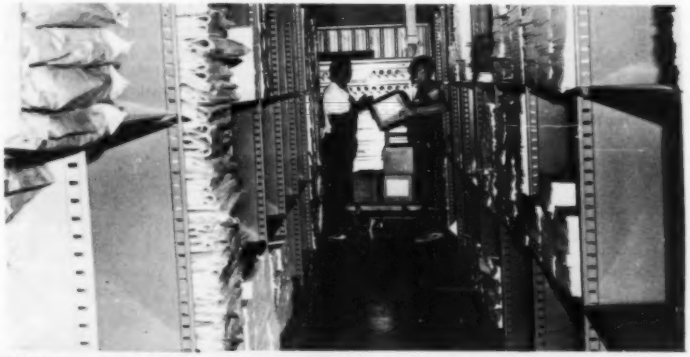
Right now, one promotion point is earned for every five hours of correspondence study. One retirement point is earned for every three course-credit hours completed.

Correspondence courses are the primary substitute for resident training. Reservists who aren't unit members can keep their MOS skills up to date through IPD. Unit members can supplement hands-on training they take in their units.

Many IPD subcourses are "criterion referenced," working the student toward a predetermined standard, not just a passing grade. Passing a criterion-referenced course exam, says IPD, earns the student the same skills as a resident student at the full-time Army service school. IPD also offers some courses which have no resident equivalent.

IPD correspondence courses are accredited by the National Home Study Council. This accreditation doesn't mean that every civilian school will accept the credit; it makes it more likely, though. IPD is now gearing up for an evaluation by the American Council on Education, which screens specific courses and makes recommendations as to how or what type of college credit can be given for a completed course.

The correspondence course program can help you prepare for the Skill Qualification Test. The IPD hopes to have all correspondence material look and read like SQT mate-



The Army's correspondence course program takes a lot of paper. Stockhandlers move thousands of lessons to the program's worldwide student body.

rial. IPD courses can lead to MOS qualification.

What's Available

DA Pamphlet 351-20, "Announcement of Army Correspondence Courses," is the course catalog. Hundreds of courses and subcourses are in the curricula, covering nearly every military skill area.

Enrollment Options

There are a number of ways to take advantage of IPD's correspondence program:

Individual Study: The oldest, most flexible and most popular enrollment option. Individual study allows everyone to work at their own pace. Both unit members and Individual Ready Reservists can take advantage of this option.

Group Study: This enrollment option provides an opportunity for groups of soldiers to enroll in the same subcourses, under the direction of a group study leader. The leader sets the pace of study, oversees the examination process, and mails the exams to IPD for evaluation.

Supervised On-the-Job-Training: SOJT allows unit members to learn MOS skills at work. Right now Signal, Ordnance, Air Defense and Aviation schools provide SOJT programs. Other TRADOC schools are developing similar correspondence programs.

How to Apply

Unit members should sit down and thumb through the DA Pam 351-20, the catalog of courses, and then have a chat with the unit training officer, NCO or full-time technician who handles training. These people can help you fill out the DA Form 145, the appropriate application.

IRR members can call (800) 325-1876, the enlisted personnel management shop at the Reserve Component Personnel and Administration Center in St. Louis. An education specialist will be able to tell you what's available, and get the application process going.

Anyone can call or write to the Army Institute for Professional Development, U.S. Army Training Support Center, Newport News, VA 23628. The phone number is (804) 878-3085, AUTOVON 927-3085.

Resident Schools: Time and Money

The most time-consuming (for you) and expensive (for the government) way to learn MOS skills is on full-time duty at one of the Army's many resident training schools.

Resident training is part of the deal for most new, non-prior service USAR recruits. Following basic training, most get skill training at a resident service school.

But what happens if you enter the Army Reserve under the Civilian Acquired Skills Program; what if you're in the Individual Ready Reserve and need to brush up on long-lost or rusty skills; what if you're in a unit that changes missions and you need to learn new skills; what if you just feel that learning the skills in a full-time training environment beats taking correspondence courses? And what are your chances of getting to go?

The Bible

Before you need to worry about the mechanics of going to resident training, you should take a look at DA Pamphlet 351-4, the Army Formal Schools Catalog. This authority lists all the courses the Army offers in all of its service schools, and lays out the prerequisites.

If you're in a unit, your Army Reserve center has a copy. If you're in the IRR, there's a toll-free number you can call to find out what's available. See the chart.

Unit Members

Unit members can look up the course material in the catalog, and then sit down with the unit training officer or training NCO. Unit training people will help you fill out the required forms. They will also have a pretty good idea if there's money in the system to pay for the training.

Money is the inconstant variable. Resident training is expensive, and the Reserve unit chain of command doesn't have enough to send everyone who'd like to go.

Who gets to go? Top priority goes to unit members whose units have changed missions, and to unit members in critical skill areas. And you're not likely to be approved if the training doesn't relate to your MOS or to your unit's mission, or if it just looks like a "nice-to-have" course.

Depending on the length of the course and local policies, the approval authority for sending you away to school may be as near as the Army Reserve command or general officer command to which your unit reports. It may be as far away as U.S. Army Forces Command.

Right now, there is no specific time limit on how long unit members can go away to school. The length of the course, your need to take it, and training money will be the determinants.

IRR

Individual Ready Reserve enlisted people can find out about going away to school by making a single, toll-free phone call to (800) 325-1876. The enlisted personnel managers at the Reserve Component Personnel and the Administration Center (RCPAC) in St. Louis will answer and put you in touch with an education specialist. The specialist will help you figure out what training you need, what's available, and help you get and fill out the application.

Some enlisted members of the IRR are being centrally managed by RCPAC personnel NCOs. Some are not. No matter, the RCPAC enlisted management shop is dedicated to helping any Individual Ready Reservist get training.

There's a catch, though, at least until October of this year. Money for training enlisted Reservists in the IRR is very tight. The longest tour RCPAC can pay for is just two weeks. MOS training usually takes longer than that, but a number of Army schools offer courses which have both resident and correspondence phases. The resident phases are mostly two weeks in length.

Next time in

RESERVE GUIDE:

Boss Hassle

TEC: Whiz-Pop-Whir Goes the Training

Can't get away to school? No time? No training funds available?

Correspondence courses don't turn you on?

Don't want to sit in a Reserve center classroom listening to lectures?

If you can see yourself with any of these training problems, don't give up. There's another way to take MOS-related training that could be downright fun.

The method is called TEC, short for the Army's Training Extension Course program. Most of TEC's 1,400-plus lessons come in audio-visual packages you can use at any Army Reserve center or Army post.

The audio-visual TEC lessons include 8mm film cartridges and audio tape cassettes. The programs run on special projectors, a number of which are available every place that TEC lessons are stocked.

They aren't just any old movie shows, either. A film/sound package is programmed to stop automatically permitting the student to answer a question or perform a task. Once accomplished, a quick press of the projector's "proceed" button continues the lesson.

TEC's audio-visual setup is flexible. It can be used at a Reserve center or post equipped with an a.c. power, 10-kilowatt generator.

Other TEC lessons are in audio-tape format. These might be more appropriate for field and group situations, such as hands-on training in a motor pool.

The third TEC format—one used by many of the traditional Army correspondence courses—is the programmed text. This is a soft-cover booklet, often illustrated, which presents information, questions, answers and explanations in a step-by-step format.

All three TEC formats—audio-visual, audio-tape and programmed text—are self-paced. You work them at your own pace and learn at your own pace.

TEC lessons can be worked during duty hours, or any time the Reserve center or post is open. Some USAR units take them along to the rifle range or on exercises when there will be some down time.

TEC's supporters call the program 'interesting, interactive, a challenging alternative to training,' which has often replaced the old problem of a huge classroom full of sleepy soldiers.

TEC works. A study by the Army Research Institute concluded that TEC-oriented soldiers retain what they learn. Eight weeks after taking TEC instruction, one sample group performed better than soldiers who were tested one day after receiving conventional instruction. TEC-trained soldiers also did better on Skill Qualification Tests than soldiers who didn't use TEC.

You can take the TEC courses at any USAR center. At least one unit in each center is custodian of TEC materials, tapes and projectors. Extra TEC materials are available at USAR centers where Army Reserve schools are stationed.

Active Army installations have TEC setups, too. Though the location of them will vary from post to post, you'll most often find them at the MOS library, post education center, learning center or post library. Another good place to look is the post's training aids shop.

TEC course offerings are listed in the "TEC Status List," issued monthly by the Production and Distribution Division, U.S. Army Training Extension Course Program, U.S. Army Training Support Center, Fort Eustis, VA 23604.

TEC's flexibility and sight-and-sound technology provide many advantages over the more traditional ways of getting MOS training. TEC has a disadvantage, though. No retirement points or promotion points are awarded for finishing a course.

Watching TV on drill time? Nope. These 80th Division Maneuver Training Command soldiers are working a self-paced TEC audio-visual lesson during lunch. MOS training and nutrition, all in one serving. (Photo by Doug Hayes.)

The School Solution

Another MOS training option is available through USAR schools. Reserve units themselves, they are located all around the United States, and we even have a few overseas. The schools conduct MOS training and other courses at Reserve centers and Active Army installations.

FORSCOM/TRADOC Regulation 135-3, "USAR Schools," tells where the schools are and what they offer. Each school also usually publishes local catalogs and lists of course offerings.

Unit members can ask the unit training officer, NCO or technician about local USAR schools possibilities and locations. Some units allow members to take USAR school courses instead of unit training. Others do not, but everyone who takes formal courses through a USAR school earns promotion points and retirement points.

IRR members can call the RCPAC toll-free number (800) 325-1876, or walk in to a nearby USAR school for information. Right now, IRR members attend USAR schools either by attachment or less formally. Either way, no pay is involved, but the training does earn retirement points and helps the Reservist make a "good year" for retirement purposes. The number of points accrued depends on the length of study and number of courses the Reservist is enrolled in.

MOS TRAINING	INFORMATION-ENROLLMENT ASSISTANCE	RETIREMENT POINTS	PROMOTION POINTS	"THE BIBLE"
RESIDENT SCHOOLS	IRR: CALL RCPAC ★ 800-325-1876 UNIT: UNIT TRAINING OFFICER OR NCO	YES	YES	DA PAMPHLET 351-4 "ARMY FORMAL SCHOOLS CATALOG"
USAR SCHOOLS	SAME AS "RESIDENT SCHOOLS" -OR- CALL NEAREST USAR SCHOOL	YES	YES	FORSCOM/TRADOC REGULATION 135-3 "USAR SCHOOLS"
CORRESPONDENCE COURSES	SAME AS "RESIDENT SCHOOLS"	YES	YES	DA PAMPHLET 351-20 "ARMY CORRESPONDENCE COURSE PROGRAM"
TEC	NEAREST USAR CENTER, USAR SCHOOL, OR ACTIVE ARMY POST	NO	NO	"TEC STATUS LIST" PUBLISHED MONTHLY

★ IRR MEMBERS CAN ALSO WRITE: CDR, RCPAC, ATTN: AGUZ-OEE-S, ST. LOUIS, MO 63132.

RCPAC Is Working on It

Late Orders May Soon Be a Thing of the Past

Late training orders, and orders that don't give Reservists time to respond, are hassles. RCPAC has begun to phase in an automated system that will soon turn around order requests within a day.

"Within 24 hours we can get a good order or know the reason why it won't go," says an RCPAC personnel manager. Some orders actions now take weeks to process.

The new system, which has been working up since last Fall, is expected to take over the entire RCPAC orders preparation duty by summer 1980.

The computer will work fast, printing thousands of orders in a few hours. It will also allow the personnel managers to instantly check up on the status of an order's action, and it will spit out more than a dozen reports from data contained in the orders.

Under the existing manual system, orders actions are bucked around to several different offices within RCPAC. Each office needs to validate or track the action. While some see that money is available for the training, others assure that the training site is laid on, and so on.

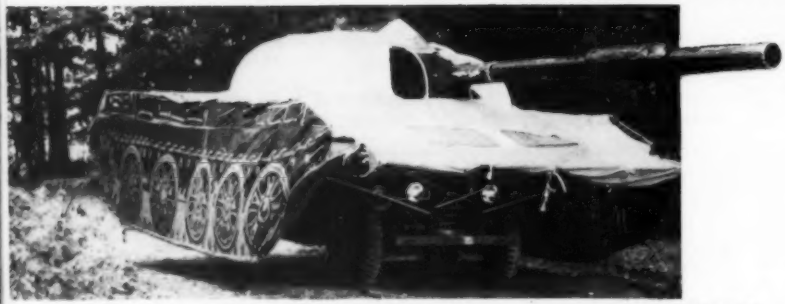
These steps, time consuming but necessary, will be handled in micro-seconds by the computer.

The follow-up reports will provide the personnel managers with reports on training received by the Reservists they manage, break out information about the training slots and sites, show retirement point accumulation, and display other information goodies.

The present manual system is a headache, but it should have passed into history by the time the big summer training orders crunch rolls around this year.

HAPPENINGS

157th Brigade's OPFOR Stages "Soviet" Attack



Yeah, yeah, we know the Soviets have 45,000 tanks and we have about 10,500, but this is ridiculous. The 157th Infantry Brigade's jeep-mounted T-62 prepares for its OPFOR attack.

The men were returning to bivouac after completing firing on the range when they saw some strange-looking vehicles coming at them down the road. A moment later, Soviet-uniformed troops descended on them from the woods, firing and shouting.

A surprise attack? You bet your life it was, at least Staff Sergeant Carl Notter thought so when his unit's column of vehicles was almost overrun by a Soviet motorized rifle platoon. "I had been told there would be aggressors, but I certainly didn't expect this," he said.

The "Soviet threat" was actually a creation of the 157th Separate Infantry Brigade's intelligence shop. During the 157th's annual training at Fort Pickett, Va., the S-2 organized an American-versus-Soviet Opposing Forces (OPFOR) situation. Assistance in pulling it off came from the XVIII Airborne Corps, Fort Bragg, N.C., and the 394th Military Intelligence Detachment of Greensburg, Pa.

To be a realistic adversary, these OPFOR people had to be innovative. Their uniforms were adapted from old U.S. fatigues dyed brown and adorned with insignia and belts made from red plastic and lace. Helmets, weapons and vehicles came from local training aids operations.

Brigadier General Dean Myerson, commander of the Pennsylvania-based 157th, had put out word that the OPFOR would keep brigade units on guard, and so they did. The brigade units encountered OPFOR on the march to the field, on several occasions while in the field, and briefly on the way back.

The intelligence network buzzed with cited reports of T-62 tanks, strange personnel carriers, and other unidentified Soviet vehicles moving in friendly areas of operations. Numerous calls for fire support and tactical air support to knock out the advancing lines of Soviet uniformed troops sounded on the airwaves.

Captain Vern Lind, assistant brigade S-2 responsible for much of the field coordination, noted how neatly OPFOR worked. Requests for future OPFOR activities seemed to increase proportionally with the amount of OPFOR activities conducted. The more a unit was hit the more they wanted the OPFOR back.

Maryland Reservists Train on Soviet Equipment

Why would American Army Reservists be firing Soviet weapons and riding Warsaw-Pact vehicles?

Because nothing beats hands-on training, even if the equipment is foreign-made and even if the students are military intelligence specialists with a wealth of knowledge about the foreign equipment and its army.

On a cold December weekend, Reservists from Maryland's 223d Military Intelligence Company and 226th MI Detachment took to the ranges of Aberdeen Proving Ground to get the "feel" of the Soviet equipment they had been studying at their training headquarters.

Providing the equipment and the hands-on expertise was Aberdeen's 11th Military Intelligence Company. The only unit of its kind in the Army, the 11th is the national control point for foreign equipment. They rebuild foreign equipment, train American troops in their use, and provide a reservoir of expertise on how to operate equipment found in Warsaw Pact armies.

After a morning indoors with Soviet weapons and communications, the Maryland Reservists moved to a high-security firing range where they observed live-fire demonstrations by the 11th. The citizen-soldiers then took their turns with the AK-47 assault rifle, the SVD sniper rifle and the light and heavy machine guns.

The next day they examined the BTR-60PB, the standard armored personnel carrier in motorized rifle units and the Soviet naval infantry. They rode in the T-54, a medium tank manufactured in Czechoslovakia, Poland and China.

Other equipment on hand for their scrutinization included BRDM amphibious scout cars, Sagger antitank weapons, Grail air defense missiles and a variety of trucks and support equipment.

"A picture may be worth a thousand words, but nothing is as impressive and lasting as seeing and using real equipment," was how Lieutenant Colonel Benjamin J. Simon summarized the training. The Crofton, Md., officer commands the 226th MI Detachment, a counterintelligence unit associated with the 902d MI Group at Fort Meade.

USAR Staff Sgt. Jonathan Leland meets the AK-47.

The Army Worm Rises at Pickett As 312th Evac Gets With MUST

by Spec. 4 Gary Dickey

It looks like a giant green amoeba rising slowly to life from a hot dusty field, something you would expect to see under the lens of a microscope, not in the woods of North Carolina.

It has several nicknames—"the Army worm," "the green machine," "the big top"—but it's in fact a Mobile Unit Self-Contained Transportable (MUST) hospital put up by the 312th Evacuation Hospital, a Reserve unit from Winston-Salem, N.C.

Last summer the men and women of the 312th took possession of their first inflatable hospital equipment. The MUST equipment provides much of the same patient care capability previously handled by the old MASH units—popularized by the long-running TV series.

"You can draw some interesting parallels between the TV characters and the people who work here," noted Colonel Minnie Sue Walker, chief nurse.

"But I don't think we have a 'Hotlips,'" said Major Betty Ann Deaton, nursing supervisor of the operating room.

When fully operational, the inflatable hospital provides an 80-bed unit comparable to a small county hospital, complete with operating room, wards, labs, pharmacy, dispensary and emergency room. The complete 80-bed facility covers some 36,000 square feet.

Commander of the unit, Colonel Carey Stabler, explained that this particular MUST facility may well be the largest field hospital of its type to be set up by a Reserve unit during an annual training period. "I'm extremely pleased with the way it's gone up. The first day or so we had forgotten many of the things we had learned before, but it all came back to us very quickly," Col. Stabler said.

Noting the advantages of the inflatable MUST facility over the old tent system, Col. Stabler noted, "We have much better conditions now for patient care and better working conditions for the staff. We can control the climate whether it's hot or cold."

Stabler explained that a significant percentage of those serving with the Reserve unit are also employed in medically related professions in civilian life in and around the Winston-Salem area.

Interestingly, the 312th was the only unit in the 120th Army Reserve Command, a command area covering both Carolinas, to be called to active duty during the Vietnam conflict. The unit performed in Vietnam under actual combat conditions and today the recovery unit at Fitzsimons Army Medical Center in Denver is dedicated to the memory of First Lieutenant Sharon Lane, the only American nurse killed by hostile fire during the Vietnam war. 1st Lt. Lane, a nurse from Canton, Ohio, served with the 312th at the time of her death.

The group still retains a number of those who served in the Vietnam conflict. Among them is Sergeant First Class Coy Vance of Winston-Salem. Having served with the 22d Surgical Hospital at Phu Bai, South Vietnam, Sgt. 1st Cl. Vance explained that the hospital used by the 312th in its annual training exercise last summer is very similar to the one used overseas. It's designed to be set up close to the combat area and serves to stabilize patients until they can be later evacuated to larger hospitals outside the combat zone.

"In Vietnam we were stationed on the perimeter of a camp and about every other night there was mortar fire somewhere in the camp, but I never felt that I was in very much danger," he said.

"I served as an ambulance driver and we received all kinds of wounds. As an evacuation hospital, we averaged keeping the patients for about three days to stabilize them, then they were sent to the larger hospital in Da Nang," he said.

Sgt. 1st Cl. Vance has praise for the performance of his fellow Reservists during the annual training period. "Everyone here has worked together like a team, and they've worked very hard. This is a big plus in my book, because we couldn't do it otherwise."

Also commenting on the unit's performance during the realistic training period was training officer Major David Gilbert. "I think the unit has performed beautifully," he said. "It's great having our own equipment. It's brand new and works well."

In addition to providing a continuous flow of air to keep the structure inflated, the generator (called a U-pak) also provides power for lights, air conditioning, heat and all electrical appliances used in the hospital. In short, the U-pak is the life support system for the entire hospital.

If there's any one person who's most familiar with the overall planning involved in erecting the hospital, it's the unit's chief wardmaster, Master Sergeant William Treece. In the unit's recent training period, Master Sgt. Treece oversaw the operation from beginning to end.

"Given two days we could probably put up a 200-bed hospital. The unit you see here, which contains 80 beds, can be erected in eight hours," he said. "In an actual combat situation, the MUST would be erected in dugout trenches with sandbags all the way around it."

Master Sgt. Treece explained that the structure is composed of a series of inflatable bubbles, each completely independent of the others. These, in turn, are supported by a steel framework.

Master Sgt. Treece watched as his staff put the finishing touches on what had earlier been a hospital in a box. As two sweat-soaked members of the unit struggled to put together one of the many steel supports, Treece said, "They've done a good job. An exercise like this gets a unit working together better than anything I know."

The 926th Engineer Battalion (Combat Heavy) flung a lot of dirt during its 1979 annual training session at Camp Shelby, Miss. The unit prepared runways, minefields, fire breaks and drainage ditches. One project was construction of a tank obstacle ditch at which, above, a Mississippi Guard M-88 tank retriever tries its hand. The 926th did the job. The big M-88 took 26 minutes to breach the ditch. Below, Spec. 3 Andrew Hill, from the 926th's A Company, does his part in relocating the Mississippi mud. (Story material and lower shot from Paul Adams, 121st ARCOM. M-88 shots by Maj. Inge Waddel, 926th Engineer Battalion.)

USAR: Meet the Starlifter

Army and Air Force Reservists see each other at Hanscom Air Force Base, Mass., regularly. They share a Reserve center at the metropolitan Boston area air base.

But until a joint service training exercise involving both services last fall, the acquaintenceship consisted mostly of nodding in the halls.

The weekend exercise brought together an Army Reserve contingent of the 351st General Hospital and Air Reservists from the 57th and 85th Aerial Port Squadrons. Support came, too, from the 514th Military Airlift Wing (Reserve), McGuire Air Force Base, N.J.

The Army Reserve participants provided manpower and several tactical vehicles from the 351st Hospital's maintenance section. The aerial port squadrons provided cargo handlers and handling equipment. The airlift wing flew in a C-141A Starlifter with two aircraft loadmasters who were responsible for loading operations on the ground and cargo stowage aboard the plane.

The exercise ate up both days of a training weekend. The Army Reservists learned and practiced the rudiments of preparing vehicles for airlift: gasoline tanks were drained to less than half capacity, exhaust stacks were covered, windshields were bolted down.

After driving the vehicles aboard at the direction of the loadmasters, the 351st folks practiced tiedown techniques and on- and offloading of the vehicles using the aircraft's power winch.

Staff Sergeant John Rubery, a maintenance supervisor with the USAR unit, talked about the exercise later. "Since it's a joint effort, we learned the importance of prior planning to make the Air Force's job easier," he said.

Staff Sgt. Rubery went on to point out that factors such as vehicle center of gravity, weight and height dimensions are critical to the proper loading. He put in a plug, too, for reading the appropriate training manuals and performing the directed safety checks beforehand.

The point of the exercise? Under mobilization, USAR units would get plenty of experience getting themselves and their equipment airlifted to where the action is. According to one exercise observer, the weekend "should be viewed as a promise of things to come."

Out of the darkness and into the light. A USAR deuce-and-a-half comes off a C-141A cargo plane during the exercise.

The Army Reserve awaits the Marine landing. (U.S.N. Photo by William Breyfogle.)

The Marines Have Landed: USAR Defends Duluth

Offshore, two camouflage-painted steel monsters wallowed heavily in the rainy swells of Lake Superior. Waiting for them onshore, dug in behind the dunes, their weapons gleaming wetly in the gray light, were the gunners.

Suddenly, the roar of engines and water spouts from the rear of the amphibious landing vehicles signaled the beginning of the invasion. The lumbering craft drifted toward the waiting troops of C Company, 367th Engineer Battalion, USAR, of Duluth, Minn.

The Marines were coming.

Earlier that week, the amphibious assault ship USS *Fairfax County* (LST-1193), with her crew and complement of 125 2d Division Marines, had steamed into Duluth as part of the 1979 Great Lakes Cruise.

The cruise, the second in two years, was to support Navy/Marine Corps recruiting in the Midwest. As part of the public affairs effort, the Marines demonstrated an amphibious assault.

Hearing this, Captain Donald B. Osborne, C Company commander, volunteered himself and his Reserve engineer company to act as the "bad guy" force and oppose the landing. "A training opportunity like this doesn't come along every day," he said, "so we jumped at it."

The morning of the exercise, company members were busy preparing the beach, planting artillery simulators and string-barbed wire entanglements. This process, according to the company's operations NCO, Sergeant Mike Anderson, was done strictly "by the book."

"There's no sense in doing this if we're not going to do it right," he said. "If the Marines want this beach, we'll make them work for it."

Just before the assault craft beached, clouds of multi-colored smoke went up from the simulators and smoke grenades. The amphibious landing vehicles dropped their rear ramps and the Marines came charging out, dropping into skirmish formation.

According to plan, the Army Reservists put up a stiff fiight (with blank ammunition, of course), but gradually fell back in the face of a determined Marine advance. The pop of rifle rounds and the smell of cordite blended with the battle yells of the Marine and Army troops.

Meanwhile on the sidelines, television cameras and radio crews from local stations kept up a running, play-by-play description of the battle for the home viewing audience.

The battle edged further inland.

Just before the Army command post was overrun, the cease fire was sounded, the dead and wounded were magically revived, and the TV crews moved in for wrap-up interviews.

According to the agreed-upon battle plan, the engagement was a victory for the Marine Corps. Bystanders judged it a tactical and theatrical success for both sides.

As one Army Reservist put it, "You always want to make the visiting team look good. We did all right. We were ready."

A 2d Division Marine chooses his USAR target. (U.S.N. photos by William Breyfogle.)

The Gap in Winter: Dress Right, Cover Down

A dark and quiet winter evening finds just two patrons in the hilltop club.

The regular says to the visitor, "You oughta see this place in the summer. They really pack 'em in."

Indeed they do.

Fort Indiantown Gap in Pennsylvania is the annual training home to scores of thousands of Guardsmen and Reservists. But most come by in the warmer months.

It is during those spring and summer days and nights that the age-old sounds return. Then come the clump-clump of the marching troops, the diesel chirp, the crackling of riflery along the ranges at the foot of long Blue Mountain.

But in winter, the Gap is very much alone. Alone with its memories.

Here the past lies all around.

Here dwell traces of an Army long gone by.

Here the rank-on-rank of company streets stand as they stood for 40 years and more.

Barrack-barrack-barrack. Mess Hall. Day room.

The pattern, rigid, rarely changes.

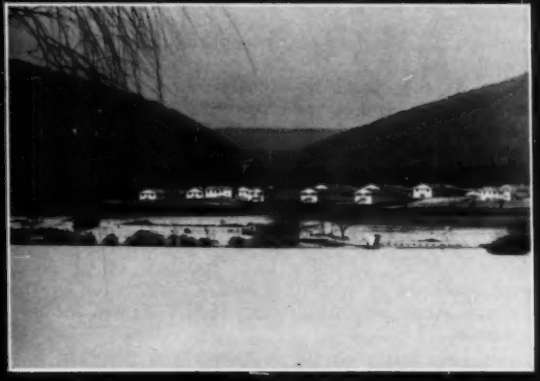
When these lumber billets still were new, they sheltered divisions. Here the 3d Armored, 1st Infantry, 5th Intantry, 28th Infantry, 37th Infantry, 77th Infantry and 95th Infantry staged and trained. From here they marched to long green troop trains that carried them to ships that carried them to Europe.

Young men who quartered here and marched away are grey grandads now. And other young men who quartered here and marched away are still the sons and bright kid brothers, remembered but not seen again.

The Gap remains very much as it always was. Off the beaten path of major Active Army needs, the post preserves the look and feel of times and ways elsewhere forgotten.

New buildings sprout here and there, answering contemporary calls. But few and far between, they do not mar the dressed-right, covered-down formations of their elders.

MERCY ST



Soviet Threat: The Shadow Lengthens

ISSUES

Americans Take a Hard Look

Late in December, when many Americans were home decorating Christmas trees, 50,000 Soviet soldiers streamed across their southern border into Afghanistan. Overnight, they violently removed that country's head of government and, with a contingent of tanks and helicopter gunships, set about to pacify Afghanistan's towns, roads and airbases.

By the middle of January it was estimated that there could be as many as 100,000 Russians spread across the mountainous country and within 15 miles of the Iranian border. Would their next move be on Iran and subsequently the Persian Gulf, the launching point for a good deal of the world's oil?

The Afghan crisis prompted many Americans to reconsider the awesome power of the Soviet military establishment. Many, including some members of Congress, were disturbed by what they saw. Consideration of the Strategic Arms Limitation Treaty (SALT II) was abruptly postponed.

Late last year, the Administration proposed a 5 percent annual increase in defense spending above the yearly inflation rate over the next five years. A year before it might have been impossible to get Congress to approve that much; polls showed that more than half the country was against bigger defense spending at that time. Now more than 60 percent support it. And in response to one poll, 55 percent of those queried said they support, not only registration, but actual reinstatement of the draft.

Now some people believe the proposed spending increase, and maybe more, is going to be a cinch getting through Congress.

But there are pessimists who doubt that a 5 percent increase in defense spending is enough. Admiral Elmo R. Zumwalt, retired chief of Naval Operations, has insisted that the United States doesn't possess the conventional or strategic nuclear forces to clash with the Soviets and that time is a long way off, he told the press, even if the country moves quickly.

It's been estimated that the Soviets spend anywhere from 11 to 14 percent of their gross national product on defense. Last year U.S. defense spending was less than 5 percent of our G.N.P., dwindling from 8.6 percent in 1962. Secretary of Defense Harold Brown has estimated that the Russians may be spending as much as 50 percent more on their military than we are on ours. This is measured by what it would cost to buy Soviet programs (including personnel) in the U.S. economy.

The assistant to the chairman of the Joint Chiefs of Staff, Lieutenant General John S. Pustay, U.S. Air Force, said in a speech that the Soviets have "for years continued to out-man, out-gun, out-build . . . us in most meaningful military categories."

In a country where 75 percent of the men are inducted into military service for at least two years, the Soviet Union keeps an armed force of 4,400,000. We have about half that much.

Their Ground Forces, equivalent to our Army and Marines, have more than 170 active divisions, compared to our 19. Granted, their divisions are smaller. A motorized rifle division in the Soviet Ground Forces, at full strength, is outfitted with up to 14,000 men. An equivalent mechanized U.S. division has about 16,000.

The Ground Forces are also well-equipped. Their tanks outnumber ours 45,000 to 10,500. They are presently producing five times as many combat vehicles and 2½ times as many helicopters as we are.

The United States may soon be giving up the claim of having the world's strongest navy, if we haven't already. Like ours, the Soviet Navy has four major fleets. However, all together, their active general purpose surface ships, submarines, aircraft carriers and other ships exceed the U.S. Navy 541 to 415.

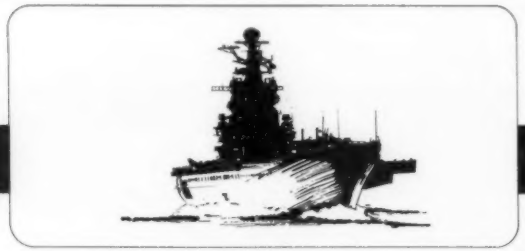
They have 271 surface warships, while we have only 178. And the Russians have more than three times as many attack submarines as the United States.

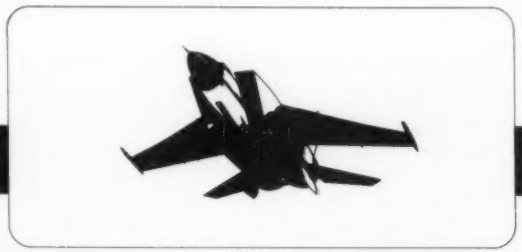
Jane's Fighting Ships declared in their 1979-80 edition that the Western powers no longer have control of the oceans. The Russians are building U.S.-style attack aircraft carriers, new cruisers and specialized warships with landing platforms that can carry full battalions of naval infantry ready to take off in helicopters and hovercraft. (See related story.)

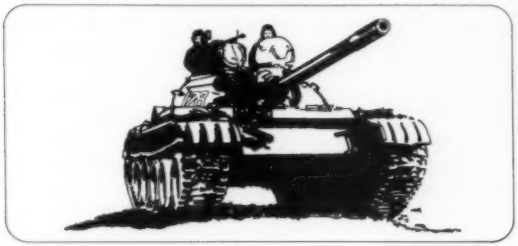
The Soviet air force has about 4,500 fighter/attack aircraft. The U.S. Air Force is in the process of building up its fighter/attack force, but even by 1984, when they expect to be fully equipped, they will only have 1,872 such aircraft.

Although most of Russia's troops are positioned in their own country, the International Institute for Strategic Studies in London has counted 20 divisions poised in East Germany and a total of 31 divisions dispersed throughout Central and Eastern Europe. Significant numbers of Soviet and Soviet-backed troops are stationed in Cuba, Angola, Ethiopia and now Afghanistan. Smaller Russian military contingents stand by in Algeria, Iraq, Libya, Mozambique, Syria, People's Democratic Republic of South Yemen, and the Yemen Arab Republic (North Yemen).

If the Soviet Union appears to be at or near the top of the military power heap—the U.S. Government doesn't concede them first place—they didn't get there without suffering horrendous losses en route. The country lost 20 million people in World War II. Before that many had died from fighting or starvation during their 1917 Revolution, and thousands of military officers were victims in Joseph Stalin's purge in the 1930s.







"The history of the Soviet Union—of innumerable invasions, of millions lost in World War II, etc.—is inevitably going to make the Russians pro-defense," said David Johnson, of the Center for Defense Information in Washington, D.C. "Their history is that they've suffered greatly in military respects."

In spite of their huge personal losses, at the end of World War II the country possessed the largest army ever with 500 divisions. They reduced to 175 divisions by 1947 and kept one million men stationed in Eastern Europe. At that time they had two good reasons to maintain an intimidating force: the need to suppress an anti-communist movement in their newly acquired satellite countries, and to counter the assumed American "threat" to use nuclear weapons.

By 1953, the Soviet Union had tested its own hydrogen bomb. And, though it may have brought them closer to parity with us, they kept turning out more weapons. As Secretary Brown has said, "We build and they build. We stop building, and they continue to build."

The Soviets have steadily built up their chemical warfare stockpile. It's been estimated that many Warsaw Pact artillery shells are actually chemical rounds. At the same time, they are constantly improving their offensive and defensive chemical capabilities and they have developed a variety of improved agents and multiple delivery systems.

The Soviet Union has the world's best trained and equipped chemical force with some 60,000 servicemen, including officers. The United States currently has less than 3,000 such personnel.

Soviet forces regularly practice techniques to disable an enemy with chemical agents. It's been suggested that, in a war between the two super powers, the Soviets would be likely to use chemical agents in a massive attack.

The only NATO country with a sizeable chemical warfare capability is the United States. But while our country has signed an international agreement to use chemical weapons only as a defensive measure, the Soviet Union has agreed to no such ban. Negotiations are ongoing between the Americans and Russians to prohibit, or at least limit, chemical weapons development and production. However, until such an agreement is reached the Soviet Union continues to make additions.

The Soviet Union leads the United States in the number of strategic nuclear systems consisting of missile launchers and heavy bombers, 2,504 to 2,283. However, this doesn't reflect the number of systems with multiple warheads capable of hitting several targets. Taking a bean count of the total force loadings, the United States leads the U.S.S.R. by 50 percent (9,200 to 6,000). Then again, theirs have more muscle. Soviet warheads have 11.8 million pounds of throw-weight compared to 7.2 million pounds for the United States.'

If the SALT II treaty were ratified, there would be limitations placed on the total number of strategic nuclear systems each side could maintain. Even before the postponement, the Russians were already over the ceiling set and, were an agreement to be reached, they would have to reduce their number of strategic missile launchers and heavy bombers by 254 units. Now they have the choice of holding at their present number or adding to the hoard.

Despite the heavy inventory of weapons, the Russians' ability to wage a war and win remains to be questioned. There's more to preventing a confrontation than possessing a strong military.

Secretary Brown has said that we shouldn't "begin to believe that military strength alone can solve all our international, let alone domestic, problems, because there continues to be a major and, in most cases, preponderant influence by diplomatic, economic and political factors in what goes on in this world." But he also concluded, "it's also true, and this is what we have come to realize, that in the absence of significant military strength, the other influences are not as effective."

In testimony before the Senate Armed Services Committee, Brown reasoned that "The United States is not now inferior to the Soviet Union in overall military strength." However, he did say that future needs would require higher spending.

Representative Jonathon Bingham (D-N.Y.) main-

tains that the Soviets have yet to catch up to us in quality machinery. "One hit" by a NATO antitank weapon "is sufficient to knock out any tank currently used by the Warsaw Pact," he said in the House. "NATO forces have 193,000 antitank missiles, more than nine times the number of tanks in the Pact's arsenal. Many of these antitank missiles are accurate from distances of over three kilometers, well outside the cannon range of virtually all Pact tanks."

Bingham claims that the serviceability of Soviet tanks is inferior, too. Their T-62 tank "tends to break down after 100 to 125 miles," he said. "The comparable figure for NATO tanks, which will have to travel shorter distances, is 150 to 200 miles. . . . In general, Pact tanks are lighter, have smaller ammunition loads, less accurate guns, and thinner armor than NATO's."

Some Army experts have suspected that, even though the Soviets spend a lot of money on improved defense, they may still not know how to manage war in more than one theater simultaneously, or how to make the transition from theater war to general war. Lt. Gen. Pustay said of the Soviets, ". . . the military is not adept at deviating from the book, and if there is any certainty about war, it's that war does not follow the book."

The Soviets may have some other problems that could have an effect on their military capabilities. An editorial published in *The Economist* magazine said that "Nearly everything is going wrong in the Soviet Union." The article cited racial unrest in Soviet Asia, Siberian projects way behind schedule, raw materials arriving months late, and delayed deliveries of foodstuffs that result in spoilage. The editorial also charged that Soviet warships are regularly breaking down and are unprotected from the air.

Russia vs. U.S.: Head to Head

	Soviet	U.S.
Strategic Forces		
ICBM launchers	1,398	1,054
SLBM launchers	950	656
Heavy bombers	156	573*
Total weapons (force loadings)	6,000	9,200
Land Forces		
Tanks	45,000	10,500
Active divisions	more than 170	19
Tactical Air Forces		
Fighter/attack aircraft	4,500	1,872**
Naval Forces		
Surface warships	271	178
General purpose submarines	270	81
Total Military Manpower	4,400,000	2,045,000
Total Defense Spending ***	$175	$139

* Includes moth ball fleet.
** Numbers planned for 1984.
*** Figures are in billions of FY 1980 dollars.
Source: Department of Defense Annual Report, Fiscal Year 1981.

* * * *

Nikita Khrushchev, former premier of the Soviet Union, once vowed that his country would bury the United States, and many Americans fear that Russia is attempting to deliver on that promise. Said Lieutenant General Daniel Graham (U.S. Army, Retired), formerly head of Defense Intelligence Agency and presently with the American Security Council in Washington, D. C., "The whole state (of the Soviet Union) was based on a concept of Marxism-Leninism, and their guiding principle is that their system is best for the world."

"It's up to them to see that the whole world lives under that system. They keep teaching that to all their children, they teach it to their soldiers, they say it to each other. And we keep pretending that they really don't believe it. But it's true," said Graham.

David Johnson of the Center for Defense Information, disagrees with that policy. "I think it's very clear," he said, "that the Soviets, in viewing the outer world from their point of view, face very large military threats that they need to prepare for."

"From their point of view, they are engaged in what they consider to be reasonable defensive measures. Just as, in our point of view, we're doing what we believe to be reasonable defensive measures.

"Because of the high level of suspicion on both sides, it's very bad for one to feel that the other is doing anything positive. For example, the Soviets reduced forces in Eastern Europe. They think this was a very significant step. We think of it as pure propaganda. We stopped the B-1 bomber. Likewise, they say it's pure propaganda," said Johnson.

Because the Russians live in a closed society in which government activities and decisions are surrounded by secrecy, and there is no free press, it's difficult to determine exactly what their ambitions are. Winston Churchill once summed up the Soviet Union as "a riddle wrapped in a mystery inside an enigma."

When the Soviets moved into Afghanistan, they may have had other intentions than using it as a first step before grabbing Iran, the Persian Gulf, then the Indian Ocean, as some believe. At Christmas time last year, the United States was moving toward an increase in defense spending. NATO had agreed to modernize its theater nuclear weapons and there was a possibility that the Soviet-backed government in Afghanistan might be expelled by Moslem rebels.

So, some analysts believe, the Soviet felt that they had little to lose by going into Afghanistan. Lt. Gen. Graham believes the Soviets have more adventurous reasons for taking over the country.

"What Afghanistan has most to offer the Soviets is access to the Indian Ocean," he said. "They want to be able to run a rail line from the Soviet Union down to the Indian Ocean. Then it's no problem for them to maintain large naval forces in the Indian Ocean. When they've done

The Soviet Ground Forces are highly mobile and pack a big armor punch. The tank score: U.S.S.R. 45,000, U.S. 10,500. © SOVFOTO

that, they'll really have a stranglehold on the free world's oil supply. Then our lines with NATO will break up, as will the lines with Japan. So there are very big stakes here."

As the polls have shown, the country is leaning toward distrust of the Soviets. But with this distrust, we are also taking action. Since the Afghanistan invasion, President Carter has placed U.S. waters off limits to Russian fishing vessels, limited the amount of grain we sell them, asked for a pullout of U.S. athletes from competition in the Olympic games in Moscow, and asked Congress to return some autonomy to CIA covert actions. And he also proposed a renewal of registration for the draft, of both men *and* women.

At the same time, we are underscoring our friendships with other nations, such as China, which shares a long border with the Soviet Union. Early this year Secretary Brown flew to Peking as part of our "normalization of relations" with them.

Brown has pointed out that we need military strength to ensure our safety in the world. ". . . the stronger our military capability is, the stronger it's perceived as being," he said; ". . . the stronger that capability, the stronger that impression, the less necessary it is to use military force to either affect a political situation or a world situation, or to cause people to believe that you're strong. You don't have to exercise it if it's visibly strong enough."

A Duty of Every Soviet Male

Meet Ivan Korobov. As a member of the Union of Soviet Socialist Republic's Ground Forces, he serves in a motorized rifle division.

There's nothing exceptional about Korobov—5 feet 6, Slavic extraction, high school education, 19 years old. He's an average Soviet soldier.

But the Soviet soldier of today is in a bigger than average army, representing a bigger than average country of some 250 million people. The Soviet Union, geographically, is the largest country in the world. It takes up one-sixth of the world's land mass and is three times as large as the United States.

The entire Soviet military is made up of about 4.4 million men and women. The Ground Forces, their equivalent to our Army, have 2.5 million members, more than all our active duty military services combined.

Korobov knows very little of the life of a U.S. soldier. However he's been told we are a dangerous enemy ready to strike at any time.

Like most of his comrades in arms, Ivan Korobov was drafted into military service. On his 17th birthday Ivan registered with a local military commissariat. A year later, when he became 18, he was inducted into military service.

Korobov wasn't really looking forward to his two years of conscripted service. He was just beginning his new job after finishing high school. But he realized that this is a duty required of every Soviet male and he accepted that. Practically every healthy male in the Soviet

Union can expect to spend time in the service.

If Korobov had been sent to any of the other combat services—Strategic Rocket Forces, Air Defense Forces, Air Forces or Navy—his time would also have been two years. However, men assigned aboard ship in the Navy or to the Border Guards serve three years.

The year between high school and entering the military, Korobov was a factory worker in Leningrad, as is his father. Ivan isn't worried about getting a job when he gets out because he's guaranteed his old job back.

Deferments to military service aren't easy and are allowed only for specific reasons, such as sole support of a disabled family member, for medical reasons, or continuation of education. These deferments are reviewed every six months with eligibility for service extending to age 27. Most young men deferred for continuation of education are eventually called to serve.

Women aren't subject to conscription. However, female specialists in some fields, such as communications or medicine, are registered to serve in event of emergency.

Anyone who thinks the Soviet military surpasses the United States in equal opportunity for women is wrong. There are women in the army—even a few officers—but their status is different from that of male soldiers. Women take the oath when entering on duty and wear uniforms, but there are few similarities beyond that.

Women may be volunteers for a limited number of assignments in traditional areas such as medicine, administration and communications. They enjoy some privileges and advantages accorded to male career enlisted and officer personnel, namely, less rigid regimentation, relative off-duty freedom and higher pay. They might live in barracks, but not necessarily. However, women aren't eligible to attend commissioning schools and there are no efforts underway to expand their participation in the armed forces.

* * * *

The day Ivan Korobov was inducted into the army wasn't a totally new introduction to military life for him. He had a good idea what was in store for him. During his last two years in high school he went through a compulsory 140-hour program of preinduction basic military training, which included some weapons training.

After induction, Korobov was sent directly to his unit where he spent the first couple of weeks in quarantine, receiving shots, uniforms and basic training. He then joined the rest of the unit where he soon took the military oath and became a member of the Soviet Ground Forces.

There's no such thing as a foot soldier in this army. All infantry units are fully mechanized, trained to enter combat in armored personnel carriers (APCs).

Korobov is a motorized rifle trooper. His basic rifle squad has nine men including one APC driver. Squads usually have one APC for each of them. There are three squads in a platoon and three platoons in a company.

These two years as a soldier, life for Ivan Korobov has been rather spartan. He receives very little pay (something comparable to about $5 a month) and has virtually no time to spend it. Most of his time—16 hours a day, 6½ days a week—is spent in rigorous training.

Any free time he has is usually given to cleaning and taking care of his equipment. Only on Sunday does the training schedule relax a bit. Then, any excursions the troops may make from camp are usually as a group.

Dating, civilian clothes and privacy are out of the question for Korobov. He has a bunk and a locker, but shares almost everything else. Leave is also an uncommon occurrence for the Soviet soldier. During his two years of conscription, it's possible Korobov may never go on leave. It's a privilege that's not guaranteed. Furloughs are bonuses granted only to the exceptional soldiers.

Pressure for a soldier to behave doesn't come only from inside the unit. His family, former school or employer may be kept informed about his performance. But the Soviet Ground Forces continue to have problems with morale and discipline, including AWOLs, drunkenness and insubordination.

Race relations are also bound to be a problem in the military. The Soviet Union is a country with 100 different nationalities. Russians are barely a majority, with 53 percent of the population, and Ukrainians, the next largest nationality, take up another 17 percent.

Russian is the official language of the Soviet Union, but for many of its citizens it's the second language. Many soldiers don't speak the language fluently.

The food Ivan eats as a soldier is basic with not much variety. Each meal usually features bread, meat and potatoes or kasha, a wheat, rice or oat porridge. Except for holidays, conscripts rarely get fresh fruits, vegetables or dairy products.

Officers, on the other hand, have more selection of better food. Dairy products, fresh fruit and vegetables are regular items on their menus.

Rank has other privileges. Officers are much better paid and may live with their families. Almost all of them have graduated from military academies similar to those in the United States. However, there are more than 100 of these university-level military schools in the Soviet Union.

The Soviet Ground Forces don't have a career noncommissioned officer corps in the same sense that we do. Most of their NCOs are conscripts who function more like our squad leaders than our NCOs. These men are selected by their draft boards and sent directly through six months of NCO/specialist training. As a result, these "conscript NCOs" are in the service for only the same amount of time as the regular draftees, and have little

Some 20 percent of Ivan's time is spent in the field. © SOVFOTO

more knowledge of the system.

A soldier who does decide to stay in the army can become a *praporschik*, something of a cross between a warrant officer and a technical sergeant. Officially, they act as chief assistants to the officers, and tend to hold the types of jobs filled by NCOs in our Army. Proportionally, however, they do not make up as large a share of their army as NCOs do in the U.S. Army.

* * * *

Thanks to his vigorous physical training, Korobov is in excellent physical condition. Beginning with calisthenics in the morning this discipline goes on throughout the day.

About 15 to 20 percent of his time is spent in the field on maneuvers. Korobov has learned to live and fight in these conditions. The Soviet Union's severe winters don't alter the schedule. Training is rarely cancelled because of bad weather.

Korobov is also prepared to fight in a nuclear, biological or chemical environment. He's often expected to wear his protective mask and clothing for long periods of time. Under these circumstances, Soviet soldiers learn to operate radios, drive trucks and conduct weapons drill. Korobov has also been taught to perform reconnaissance of contaminated areas, cross these areas and to decontaminate terrain, vehicles and equipment.

Korobov's training as a soldier is thorough, but routine. He practices his skills over and over until he can perform them without thinking. The training is simple and repetitious.

In his training, there's very little chance for a conscript to show ingenuity. All decisions are made by the commanding officer or one of his assistants. The attitude among the troops is don't do anything more than you have to and don't volunteer. You'll get through with the least amount of hassle that way.

Ten to 15 percent of Korobov's training schedule is political. He and his comrades aren't too interested in this subject because they've heard the same doctrination from school and in preinduction training.

In fact, there's very little political discussion that goes on among the troops even though most are members of the *Komsomol*, the youth auxiliary to the Communist Party. They also know that the *zampolit* has informants to report any political dissidence. The *zampolit*, an officer who conducts political training, also functions as an executive officer, training officer and recreation officer.

Although most Soviet citizens receive an extensive amount of political instruction from childhood on, only about six percent of the total population ever join the Communist Party.

When Ivan Korobov finally finishes his military service, he'll be able to get his old job back at the factory, Had he been a student, he'd have readmission rights to the school he was attending prior to service.

Boris Levin, who has the bunk next to Korobov, is married. His family isn't able to follow him to his duty station, nor does he get extra pay. He'll get very little chance to see his family, if at all, during this two-year hiatus, but the Levins do get a few benefits.

With a husband earning only $5 a month, Mrs. Levin needs to work. She is guaranteed a job one month after she requests it. The Levins may also retain housing while Boris is on active duty or they may keep their name on housing waiting lists during this time—something that's a benefit in a country with severe housing shortages.

Levin and Korobov's commitments to their country won't be over when they leave the service. They will be considered in the reserve and subject to recall until age 50. Women who have served can be called back until they're 40.

* * * *

The Soviet soldier of today has very little in common with the Soviet recruit who fought in World War II. On the average, he's no longer a peasant from a rural collective. Rather, more and more often, he's a factory worker from a large city.

He's better educated with at least 10 years of schooling behind him. He can better understand the sophisticated technology of missiles, weapons, tanks and

vehicles that are becoming more and more abundant in the Soviet Ground Forces.

If need be, the Soviet soldier is prepared to fight.

Want to See for Yourself?

There's a good movie in the Army film library system that shows the life of a young Soviet soldier. The flick, AFIF 227 ("Comrade Soldier"), was produced in 1968 by ABC News. Though some of the material is dated, the basic reality of life in the Soviet Army hits home: it's a tough outfit filled with strong, young, motivated soldiers.

A call to the nearest Army installation Training Aids Service Office (TASO), will start the process of borrowing a copy of "Comrade Soldier."

Army Reserve Magazine's staff film critic promises that you won't be disappointed.

The Soviet Reserve

When Ivan Korobov finally completes his active military duty, he'll become a civilian once again.

That's not to say, however, that he'll never be called to put on the Soviet uniform again. Korobov, like every other healthy veteran of Soviet military service, will be a reservist. And it's very possible that he'll return to duty, if only for refresher training.

Soviet enlisted men are subject to recall to active duty until their 50th birthday. For officers, the obligation may extend to age 65. Women who have served are in the reserve until age 40.

Needless to say, the call-up capability of trained personnel by the Soviet military is enormous. About 1¼ million people pass from active duty to reserve each year. Those who were originally deferred from military service, because they were in school or for some similar reason, are also subject to call up. Just the total number of reservists in the prime-age class, 18 to 34, has been estimated as high as 22 million.

Soviet reservists, however, don't take part in monthly or weekly drills as many American Army Reservists do. They're in a status something like our Individual Ready Reserve, yet from time to time they may be told to report for active duty training or to fill out division strengths in maneuver exercises. Officers may be called to attend service schools.

There is some evidence of inactive duty training conducted by military commissariats in the Soviet equivalents of our Reserve centers and National Guard armories. Reservists may also be dispatched to a short-term duty assignment abroad, such as Afghanistan, where it's believed they made up a good share of the invasion force.

The Soviet army's 170 active divisions are divided into three categories. Category I divisions are manned at 75 to 100 percent of their projected war strength. Divisions stationed in Eastern Europe are all Category I. Category II divisions are manned at about 60 percent. About one-third of the divisions inside Russia are either Category I or II.

About half the Ground Forces divisions are in Category III. They're manned at about one-fourth their desired war strength.

With mobilization, Soviet reservists would be called to bring the divisions up to strength. It's expected that all could fill up in about a week. While divisions in Categories I and II are considered combat ready, Category II divisions would require training.

Reservists are assigned categories by the amount of time they've been out of the service. Only the most recently released would be assigned to Category I divisions, which would expect almost immediate readiness.

Another grouping of division bases, not carried on the active army lists, keep a minimum cadre (200 to 300 men in peacetime). Although they could be brought to strength within a month, it would take several months for them to achieve combat readiness.

One of the reasons it would be fairly simple to bring the divisions up to strength is that the reservists are easy to locate. All reservists are required to register with their local military commissariat office.

It's the commissariat's function to induct, process and separate all military personnel, coordinate local pre-military training and maintain personnel records and a registry of all equipment that has military use.

They also keep track of the reservists' military specialties. Some reservists may be pre-assigned to units where they would report in case of a call-up. Other names are kept in a pool. Under mobilization, they would be sent where their specialty is most needed.

Soviet Navy: Growing

by Dean Honeycutt

Nikita Khrushchev once scoffed at deep-water navies, saying large warships were only useful for hauling admirals around. Subsequently, during his era of power, Russian naval vessels were scrapped and orders for new ones cancelled, as the Soviet Union concentrated on building a post-war navy limited primarily to coastal defense.

Then, in 1956, Anglo-French forces invaded Suez, and the Soviet Navy was unable to interfere. In 1958 the U.S. Navy landed Marines in Lebanon and, again, the Soviet Navy was powerless to stop them.

The humiliation from those events prompted the Soviets to make changes. Now they devote enormous resources toward the development of an ocean-going navy second to none. The Soviet Navy currently monopolizes numerical advantages in virtually every warship category except aircraft carriers, the backbone of the American Navy—and the butt of Russian "sitting duck" jokes 10 years ago.

But the Soviet Union is planning to build its first

The Soviet Navy displays a continuing concern with surface combat. Here, a Sverdlov-class cruiser rides alongside a service craft.

attack carrier, a significant step in Moscow's plan to assemble a powerful deep-water navy. The ship is expected to displace over 60,000 tons of water when fully loaded.

The Soviet Navy already has two *Kiev*-class carriers (43,000 tons) and two *Movska*-class aviation cruisers (15,000 tons) equipped with VTOL (vertical take-off and landing) aircraft and antisubmarine helicopters. More *Kievs* are expected in the 1980s. The Soviets call these ships "cruisers," presumably to distinguish them from the American aircraft carriers they once considered obsolete.

Soviet naval strategy previously emphasized defense against, rather than competition with, established American naval threats like the aircraft carrier. This strategy, naval experts assert, accounts for the large Soviet fleet of about 269 major surface combatants, including cruisers heavily laden with lethal anti-ship and anti-aircraft missiles, and forests of fire control radar systems.

At present, the largest Soviet cruiser displaces only 15,000 tons. but the Russians are now building four new classes of cruisers, possibly including one behemoth in the tradition of the old-fashioned battle cruiser.

This competing force may reflect a rather flattering respect for American carrier-based aircraft, one of several technologies the U.S. Navy still dominates. However, the burgeoning Soviet naval force also suggests a ship-building capacity far outstripping any American effort to keep pace with it.

U.S. experts are naturally apprehensive about Soviet naval developments. "Twenty years ago, Soviet sea power was essentially unimportant," said Norman Polmar, one of America's leading specialists on the Soviet Navy. "Even a decade ago, the Soviet Union could not, except for its submarine fleet, be considered a serious contender for ranking as one of the world's major naval powers."

In his opinion, "Today, the Soviet Union can boast the world's largest and most modern surface navy, the largest and most modern ocean research and fishing fleets, one of the largest and fastest-growing merchant fleets, a potent naval air arm, and one of the most advanced ship-building industries in existence."

One Soviet shipyard alone—the huge complex at Severodinsk on the White Sea, for instance—may have a greater nuclear submarine-building capacity than the combined capabilities of the United States, Great Britain and France. Even though operating at 50-percent capacity, the Soviet shipyards are building about 12 subs a year, four times the U.S. rate. And the latest Soviet submarine class under construction, the *Alfa,* has a titanium alloy hull that will permit it to operate at greater depths than other subs, and has demonstrated a high sustained speed.

Today the Soviet Navy operates regularly out of four fleet areas, maintaining about 40 vessels in the Mediterranean, and regularly pays visits to ports scattered across the globe. Twenty years ago, Soviet voyages outside the Communist sphere hardly averaged one per year.

"Showing the flag" is just one objective of a navy with growing political and military influence. In recent years the Soviet Union has used its navy to support client states and friends in time of crisis. Soviet warships were close by during the 1967 and 1973 Arab-Israeli wars, the Bangladesh War of 1971 and the Cuban intervention in the Angolan civil war during 1975.

Conventional conflicts could rapidly escalate to nuclear levels, given the limited ability of the Soviet's heavily strategic, nuclear navy to wage conventional war.

"There are virtually no impediments to some viable Soviet role in showing the flag and in all-out nuclear war," said Commander Steve Kime, faculty member of the National War College. "The credibility of Soviet naval power becomes more circumscribed, however, as one considers levels of conflict approaching the center of the spectrum. They reveal a Soviet naval profile without a formidable midsection."

"Soviet naval capabilities," Kime continued, "have not been tailored to fit" a comprehensive image entailing conventional naval exchange—flare-ups, brief "wars at sea" or prolonged naval theater conflicts.

Director of Naval Intelligence Rear Admiral Donald Harvey noted a number of weaknesses in the Soviet Navy which could interfere with its ability to perform in these conventional scenarios. The Soviets still lack a meaningful sea-based tactical air capability. The Navy's underway replenishment capability is low. And, according to Rear Adm. Harvey, geography gets in the way of the Soviet Navy, separating major fleet areas and restricting access to the open oceans.

These shortcomings aside, the impressive strategic profile of the Soviet Navy is not likely to change in the decade to come.

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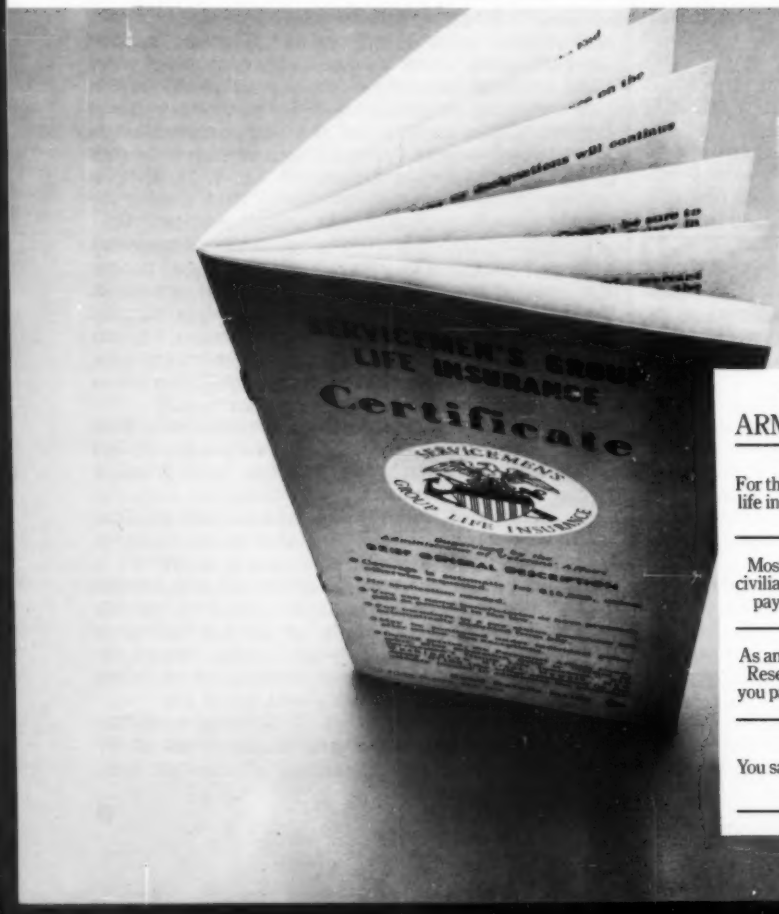

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Army Reserve Magazine's *book reviews are provided by Leonard Weston and James Cooper, historians for the U.S. Army Test and Evaluation Command, Aberdeen Proving Ground, Md.*

***Battleship: The Sinking of the Prince of Wales and the Repulse*, by Martin Middlebrook and Patrick Mahoney (Charles Scribner's Sons, New York, 302 pp., $12.50).**

The authors tell the story of the British battleship *Prince of Wales* and the battle cruiser *Repulse*. In the summer of 1941, the British, under the prodding of Prime Minister Winston Churchill, decided to send a "decisive deterrent" to the Indian Ocean. The planned force consisted of these two capital ships plus the aircraft carrier *Indomitable*. However, the carrier ran aground outside Kingston Harbor, Jamaica, on Nov. 3, 1941, and wasn't able to sail with the others.

One month later the Japanese confirmed that the *Prince of Wales* and *Repulse* were in Singapore harbor. But this unexepcted arrival of the big ships didn't bully the Japanese. Within four days, they attacked Pearl Harbor. When the two British ships, along with three destroyers, sailed from Singapore to meet the enemy head on, the *Prince of Wales* and *Repulse* were sunk by Japanese aircraft.

The British Admiral Sir Tom Phillips hadn't taken precautions to ensure air cover for his vessels. Both the British and the Japanese had the mistaken idea that the *Prince of Wales* might be unsinkable by aircraft. They were both wrong.

By the middle of December 1941, both the British and the United States had lost, not only vital ships, but any chance of stopping the Japanese quickly in the Pacific.

This book can be read in two ways. The first is a well-written sea story. We know the outcome, but the story is interesting still.

The second is an account of the impact technology had during World War II. Except for the atomic bomb, history gives few examples of new weapons bursting upon the scene. The tank and the airplane had a more decisive role than in World War I. The Germans taught the world that they were weapons capable of inflicting savage defeats on their enemies.

This is a good book for anyone who wants to read about the end of one era of warfare and the beginning of another. Before the sinking of the *Prince of Wales* and the *Repulse*, no battleship had been sunk exclusively by aircraft in wartime. After this battle, a ship-to-ship surface engagement was the exception. Later in the war the Japanese learned the same lesson when the *Yamato*, their 18.1-inch-gunned battleship, was also sunk by aircraft.—*J.C.*

***Out of the Sky: A History of Airborne Warfare*, by Michael Hickey (Charles Scribner's Sons, New York, 1979, $14.95).**

For 30 years after the end of World War II, the history of airborne warfare was described only in bits and pieces. Suddenly, a number of high-quality accounts have hit the book market. *Out of the Sky*, reaches back to man's first serious attempts at aerial warfare in the 1850s in Europe and Asia, expands to include the American experience in the Civil War period, runs through World War I attempts in these categories, and extensively covers the common experiences of all combatants in World War II.

Not content with these limits, Hickey moves ahead in time to the Suez conflict of 1956, the various experiments and achievements of the Israeli armed forces, and the U.S. innovations and airborne actions in Korea and Vietnam.

Michael Hickey is a British academician and former military man who has chosen to use a large-scale canvas to paint the universal experience of a variety of participants in aerial warfare modes. The actor's list is extensive: the Russians, Japanese, Germans, Italians, Israelis, British and Americans are all represented.

The Russians were the curtain raisers in the creation of "vertical envelopment," or modern airborne warfare. The Russians organized the first military parachute combat unit and also provided some of the very first usage of the helicopter as a fighting vehicle. The Germans, although not the creators of airborne warfare techniques, adapted and expanded them to a large-scale use of gliders and air-landed combat troops.

The British were interested early spectators but were generally complacent about this novel system of going to war. Likewise, the Americans were willing to watch and wait on parachuting and glider-borne military developments in the late 1930s and early '40s. However, they did display an enthusiasm to adopt the British-devised idea of a "grasshopper aircraft," light observation aircraft used on the battlefield. In spite of a slow start, the Americans eventually lead the world in adapting the helicopter to warfare.

The author emphasizes that, throughout these various events, a common thread exists. To be successful, an airborne operation requires "careful planning, meticulous development, thorough in every conceivable detail, plans communicated to every participant, actions rehearsed and evaluated." Another key ingredient was "intelligent, brave and thoughtful soldiers with an ability to think for themselves . . . adaptable and skilled men who perform all military arts aggressively."—*J.C.*

***Citadels Ramparts and Stockades*, by Irvin Haas (Everst House, New York, ?980, $11.95).**

Forts are fascinating archealogical and historical sites. They played a variety of roles in the creation of these United States. The obvious function of providing protection from hostile elements was only one function. These man-made structures were political, economic and social centers in our national development. They nourished the beginnings of justice, religion and education. Fort sites became transportation centers as American business and commerce advanced westward.

The rise and fall of the fort, rampart and stockade make this book very interesting reading. Irvin Haas has assembled a selective sample of about 100 American forts which reflect the history and activities of our forebearers from the colonial period to modern day. His historical sketches and extensive set of illustrations are informative and helpful guides. The book is valuable for the serious student of historical events as well as the casual traveler. Are there other books with a more exhaustive listing of this subject? The obvious answer is yes. But are they as handy as Mr. Haas' work? Probably not.—*L.W.*

GIZMOS

Staying Alive on the Battlefield Of Tomorrow: An Exercise In Mastering Sophisticated Technology

by Dean Honeycutt

Reconnaissance and target detection has come a long way since the Civil War-era spying balloons and the sitting-duck airships of World War I. Scouting the adversary is almost exclusively electronic, computerized, instantaneous and chillingly accurate.

Infrared imaging, laser guidance systems and video screens leave little to chance on the hypothetical battlefield.

Some of the Army's most intriguing research has been devoted to the development of smart bombs, seeing-eye helicopters, computer-piloted reconnaissance aircraft and the training necessary to survive on the electronic battlefield these developments have created.

Flying Eye

A new helicopter-mounted seeing eye, designed to detect the movement of enemy forces on the battlefield—both by day and by night without regard to most weather conditions—is under development. The project, termed the Stand-Off Target Acquisition System (SOTAS) uses a heliborne radar, data-linked to friendly tactical field headquarters on the ground. On the ground, the sky-snooper's electronic gatherings will be processed, analyzed and displayed on video terminals.

Sikorsky Division of United Technologies has been awarded a contract to modify the new UH-60A Black Hawk helicopter to provide the SOTAS aerial platform. Motorola, and Harris Corporations are the prime contractors for the engineering and data link development, respectively.

SOTAS ground stations will be mobile, mounted in five-ton trucks. The primary ground location will be division headquarters; secondary ground sites include the division tactical command post, division artillery headquarters, and the headquarters of each division's three maneuver brigades.

Look Ma, No Pilot

Related in concept to the SOTAS program, but twice removed technologically, is a new remotely piloted vehicle (RPV) system that can track enemy targets miles away. It recently won approval from the Army for full scale engineering development.

The $101-million contract with Lockheed Missiles and Space Co. will produce six-foot-long, 220-pound aircraft borne of boomerang technology that launches them with catapults, governs their flight patterns with split-second computer accuracy, accommodates mid-flight maneuvers and even returns the vehicles via mobile recovery systems with infrared sensors that "fly" them into nets on the ground.

The RPV is an elaborate system intended to provide highly accurate target location, artillery adjustment and designation for precision-guided munitions like the Copperhead and Hellfire missiles. It takes seven standard Army trucks—or a C-5A—to carry the whole invention, which includes a ground control station, a launcher and a recovery unit, in addition to the actual aircraft. It's all truck-mounted and operable with a crew of 13.

The recovery system is similar to one used in more than 200 successful recoveries during earlier Aquila RPV technology demonstrations. Using an on-board laser and television camera to track down targets, the RPV is a direct outgrowth from the Aquila program.

Lockheed program manager F. David Schnebly described a typical mission this way:

"Once the control and support equipment has been set up at a tactical location, the air vehicle (A/V) will be fueled and placed on the launcher for pre-launch checkout controlled by the ground station computer.

"Geographic way points," Schnebly continued, "which the A/V will pass during its mission, are preprogrammed into the ground control station computer prior to launch and sent as intermittent update commands

SOTAS: Artist's rendition of the airborne snooper.

RPV: Pilotless boomerang aircraft.

via a data link to the on-board autopilot, which flies the A/V.

"Once the A/V has been launched, it automatically seeks each pre-programmed way point until it returns to the recovery area, which is the last way point programmed."

The A/V operator can override the flight plan, Schnebly added, and send the vehicle different speed, altitude and heading commands at will. A flick of a switch will return the A/V to its original course.

Regardless of complex maneuvers and inevitable turbulence, the A/V's laser remains locked on designated targets, even if they happen to be moving.

Fire and Forget

Similar advantages are built into precision-guided munitions that seek out selected targets with laser and TV guidance systems. Future guidance units will provide thermal images of targets through imaging infrared (IR) seeker units, now in the advanced development stage at Hughes Aircraft. IR units add nighttime and low visibility weather capability and improved tracking precision to missile and glide weapons currently deployed by U.S. forces.

IR seeker units are being developed for three weapons—the Air Force GBU-15 and Navy Walleye glide weapons and the Maverick air-to-ground missile.

Hughes's IR seeker senses the thermal image of the target area and produces a TV-like picture on an aircraft's display panel. In the case of the Maverick, the pilot selects a target from this image, locks the seeker onto the target, and fires the missile. The IR seeker then automatically guides the missile to the target, leaving the pilot free to get away or fire another missile.

Something to Look Forward to In the Pages of Army Reserve Magazine

Coming Up Next Time:

—What to Do When the Boss Says 'No' To Reserve Training

—104th Division HERITAGE

—ROTC Adventure

Play It Again, SAM

The 1973 Mideast war convinced low-flying pilots that Soviet antiaircraft systems, used by Egypt and Syria, are a force to be reckoned with. Surface-to-air missiles (SAM) and antiaircraft artillery were highly successful against Israeli ground-support aircraft.

One of those weapons, the Soviet ZSU-23-4, uses four 23-mm cannon linked to a radar. It's often deployed along the forward edge of a battle area. And it's lethal.

The ZSU-23-4 fire control system, like any radar, emits telltale electronic impulses. It's this radar signal that is simulated in the tactical radar threat generator (TRTG), a training device recently received for ground-support pilots.

The TRTG is a self-contained, state-of-the-art electronic system that broadcasts electronic impulses similar to those of antiaircraft weapons in the Soviet inventory. These fire control radar signals are detected by radar warning receiver sets currently deployed to all priority aviation units throughout Europe, Korea and the continental United States.

All Army first-line helicopters and ground-support aircraft are scheduled to be fully equipped with the radar detecting set by the end of 1981. And the Army, which bought four shelterized TRTG systems in 1978, may purchase up to 90 of the generators in the future.

There's a good chance TRTGs will be delivered to Army aviation units in Europe. Forty-four TRTGs are slated for delivery to the Air Force, and NATO countries are also showing interest in the system.

After training with TRTG, ground-support pilots will be able to identify threats, like the ZSU-23-4, and survive in the electronic battlefields of the future.

IR: Infrared target-seeking Maverick missiles.

TRTG: Air Force version of radar simulator.

Microwave Ovens: Safe, Quick and Easy

A microwave oven is a pretty nifty thing. You can defrost and cook a wide variety of foods in a fraction of the time it would normally take in a conventional oven. It's nice to have for people constantly on the go.

But is it safe? There's been talk that the radiation emitted from microwave ovens can cause eye cataracts, cancer and sterility in men. People with pacemakers have at times been warned to stay away.

The Food and Drug Administration (FDA) has published a pamphlet, "Microwave Oven Radiation," that puts these rumors to rest and explains the basics.

Microwaves are a form of electromagnetic radiation, which means they consist of electrical and magnetic energy moving together through space. Besides home application for heating food, microwaves are used to detect speeding cars, send telephone and television communications, and treat muscle soreness. In industry, microwaves dry and cure plywood, raise bread and cook potato chips. However, they should not be confused with X-rays, which are more powerful.

Since 1971, microwave ovens have been carefully regulated by the FDA. They have set limits on the amount of microwaves that can leak from an oven during its entire lifetime of use.

No more than five milliwatts of microwave radiation per square centimeter are allowed at approximately two inches from the oven surface. It would take much more than that to harm anyone. Furthermore, as a person moves away from the oven, the level of any leaking microwave radiation drops off considerably. For instance, a person standing 20 inches away would receive about 99 percent less microwaves than he would at two inches.

When the oven is turned off, microwave production stops and there are none left behind.

Microwaves are produced inside the oven by an electron tube called a magnetron. The microwaves bounce back and forth within the metal interior until they hit the food and are absorbed. This causes the water molecules in the food to vibrate, which produces heat. It's this heat that cooks the food. However, the food isn't made radioactive nor is it contaminated.

Because food cooks faster and only the food is heated in this process (the oven remains cool), you could say that microwave cooking is more energy efficient than the conventional stove heating method.

Also, the nutritional value in foods may be retained better in microwave cooking as opposed to conventional methods. Because microwaves heat the food more quickly, less nutrients are burned. And since there's no need to add water, water-soluble vitamins aren't destroyed.

Microwaves won't pass through metal so metal pans or aluminum foil shouldn't be used as containers in microwave ovens. Glass, paper, ceramic and plastic containers are ideal. However, you should avoid soft plastic (such as Tupperware) that could melt from the heat of the food.

The FDA warns against using microwave ovens for home canning. They believe that microwave ovens, or conventional ovens for that matter, can't produce high enough temperatures to kill harmful bacteria.

To this date, there have been no documented cases of radiation injury due to microwave ovens. Any injuries that have been reported were burns that could have happened with conventional cooking, such as steam from hot food.

Cataracts or temporary sterility can only be caused from exposure to large amounts of microwave radiation, much more than can leak from a microwave oven.

For a long time it was feared that leakage could interfere with the proper functioning of certain electronic cardiac pacemakers. Electronic shavers, auto ignition systems and other electronic products have also been blamed for interference. The problem has been solved, for the most part, by redesigning pacemakers to withstand electrical interference.

As we've said before, there's little reason to worry about excess microwave leakage from these ovens. However, if you believe your oven might be leaking excessive microwaves, contact the oven manufacturer, a microwave service organization, your state health department, or the local FDA office.

The FDA recommends that you avoid microwave testing devices sold commercially. They have been tested and found generally inaccurate and unreliable. Testing devices used by public health authorities, however, are regularly tested for accuracy.

* * * *

You can get a copy of "Microwave Oven Radiation" by writing to the Consumer Information Center, Pueblo, CO 81009.

Our Persistent Monster: Inflation

In January, the Federal Government announced that the cost of living had shot up by some 13.3 percent in 1979, as measured by the consumer price index.

To help people understand the complex problem, the Adverstising Council has published an inflation guide, "Dollar$ and Sen$e." Written in simple language, it's free from the Consumer Information Center.

Inflation means that things are more expensive than they used to be. What you could buy for $1 in 1967 costs you $2 today. Some items have been affected more sharply. Less than 10 years ago, in some parts of the country, it was possible to buy a gallon of gasoline for 25 cents. Now it costs $1.25, or 500 percent more, and is expected to climb to $2 by the end of the year.

Inflation has many causes. One of them is government spending. Between the mid-1960s and '70s, the U.S. Government spent considerably more money than taxpayers were able to provide. This is called deficit spending.

While this was going on, consumers were spending more than ever, thus driving up the demand for products. And although we were spending more, we weren't producing as much. We began buying more imported goods. Subsequently, the value of the dollar fell in overseas spending. Americans were afraid of losing their buying power, so they did what only seems natural: they demanded higher wages. And this contributed to inflation.

Increased government spending adds to inflation by creating or expanding programs that, in turn, create demand for more goods and services than the economy can support.

The Federal Government can also increase inflation through its monetary policy. The Federal Reserve System issues all the paper money we use and attempts to control the amount of money available for lending from banks. If the Federal Reserve System allows too much money supply and expands credit, increased demand can result. And if there's demand beyond what's produced, again, prices go up.

Government has other ways of upping the price of goods. Regulations are one way. Zoning regulations can increase the cost of a new house by specifying that it must have certain dimensions, be on a certain-size lot, or constructed with special water or sewage systems.

Environmental and safety regulations affect prices. Automobile manufacturers frequently complain that they're forced to raise the price of their products because of safety requirements set by the government. At the plant, safer working conditions demanded for laborers may result in an increase in the price of the final product. Companies that are forced by environmental rules to treat chemical wastes before disposal have to spend extra money to get this done. The consumer eventually pays the cost.

The increased cost of food is also a leading cause of inflation. Bad weather generates shortages and sends prices skyrocketing. They will zoom even higher when the costs of other services in food-related businesses go up. Two-thirds of the price you pay in the market goes to pay for middleman operations like processing, transportation, fuel and marketing.

While the country is demanding more goods, productivity is lagging behind. In the '60s our productivity increased on an average of 3 percent a year. In the '70s we went ahead at only 1.6 percent per annum. Last year productivity *fell* .9 percent.

Because our productivity hasn't been steadily climbing, but our demand has, we have been relying more and more on foreign trade. Just 10 years ago, the United States was importing very little oil. Now half our oil comes from overseas. We also import a lot of automobiles and we are having Sweden and Japan make some of our steel.

The import-export deficit decreases the value of our dollar in comparison with other industrialized nations. Since we have established a willingness to buy their products—a demand—they feel free to raise their prices. When the products we are buying from them become more expensive, our dollars become "cheaper" and inflation gets worse.

Finally, inflation begets inflation. No one wants to lower their standard of living, so we ask for more wages. In order to pay for those raises, corporations are forced to raise the price of their products. Products become more expensive, so people demand more money . . . and so on and so on.

The real victims of this spiraling inflation are people with fixed incomes, such as retirees getting monthly payments that don't change with the cost of living. Some incomes are growing, but not keeping up with inflation. In this category are government workers and military service people.

We can continue inflation while we become more and more miserable about the high cost of living. Or we can do something about it. The Federal Government in the 1980s has plans to cut the deficit by one-half of what it was in 1976. And regulations are getting a second look to see whether some may be overly burdensome, unneeded or stifling to competition. For example, in 1978 the airline industry was partially deregulated. Individual airlines were once again allowed to compete for routes and set their own rates, which subsequently created competition and lowered prices for customers.

Tax incentives are being offered to companies to get them to modernize and improve production. The government is also spending more money on research and development that would encourage productivity.

"Dollar$ and Sen$e" encourages you to be a careful consumer and buy wisely. Don't waste your money. When products are in short supply, try to use less. You'll not only help the economy, you'll save money, which is another "Dollar$ and Sen$e" recommendation. Open a savings account. Don't take on a debt you can't handle.

Living within our means applies to everyone—individuals, families, businesses and government—in order to get us out of inflation.

* * * *

You can get a free copy of "Dollar$ and Sen$e" by writing to the Consumer Information Center, Pueblo CO 81009.

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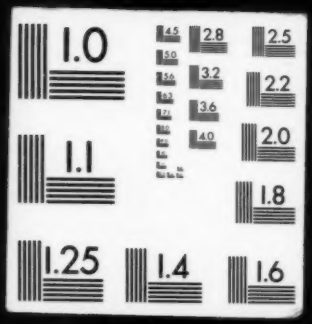
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